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A NEWSFIELD PUBLICATION
NO. 51 APRIL 1988
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CRASH

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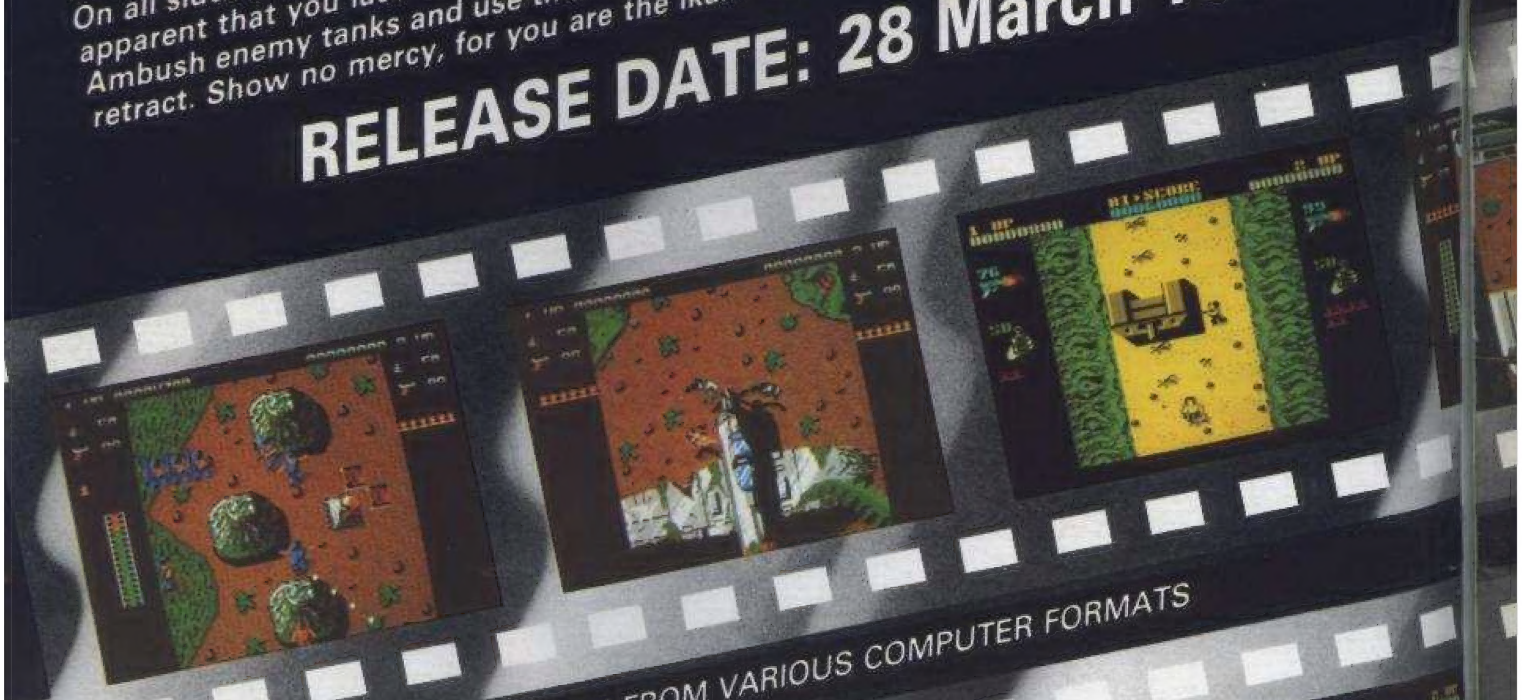

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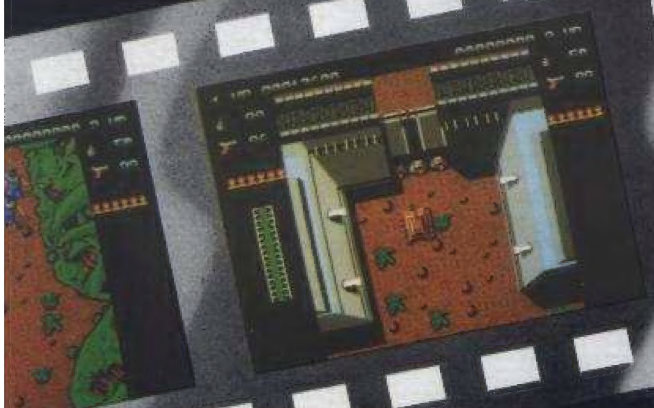

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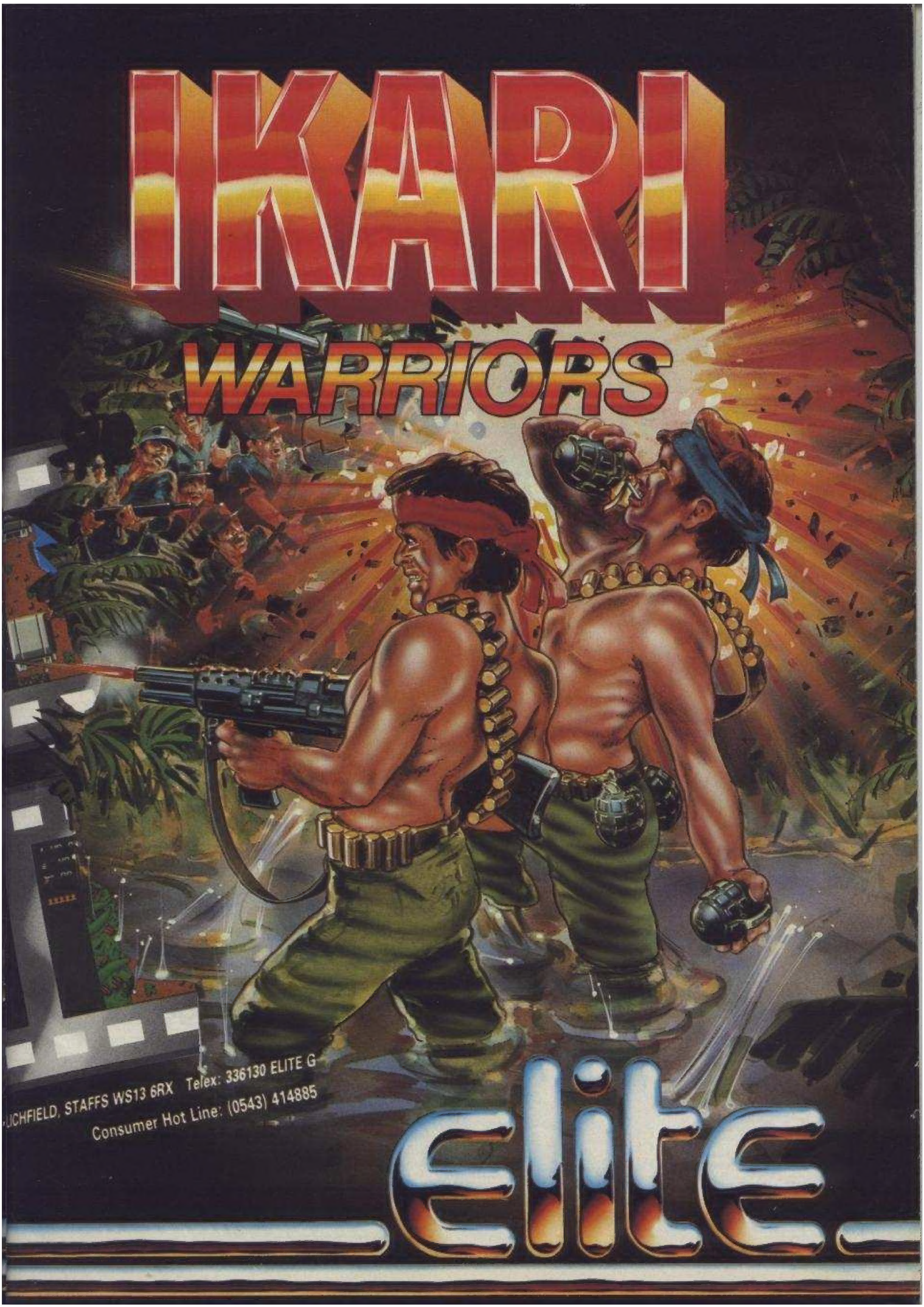
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Carol Kinsey
SUBSCRIPTIONS
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PO Box 20, Ludlow, Shropshire SY8 1DB

Typeset by the **Tortoise Shell Press**, *Ludlow*. Colour origination by **Scan Studios**, *Wallace Road, London N1*. Printed in England by **Carlisle Web Offset**, *Newtown Trading Estate, Carlisle, Cumbria CA2 7NR* – a member of the BPCC Group. Distribution by **COMAG**, *Tavistock Road, West Drayton, Middlesex*.

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TOTAL: 96,590
UK/EIRE: 90,822

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COVER DESIGN & ILLUSTRATION BY OLIVER FREY

FEATURES

35 THE BEST OF BRITISH
In an exclusive interview Roger Kean, former CRASH editor, talks to the greatest software house of them all – Ultimate

49 STRATEGY SPECIAL
Double the normal size, Philippa looks at some moral dilemmas and Matthew Stibbe shows how you design a wargame

57 THE BEST OF 1987
You voted for them, now see the results

83 LOOKING FROM ANOTHER ANGLE
In a break from the norm Will Brooker takes a fresh look at the world of 3-D games

92 NATIONAL GAMES PLAYERS
The first ever British Computer Games Championship – enter now!

REGULARS

8 NEWS
The revival of the C5

29 LLOYD MANGRAM'S FORUM
It's raining, says Lloyd. We know, says a reader.

41 PBM MAILBOX
The PBM convention – what a lovely time we all had . . .

42 ADVENTURE TRAIL
It finally settles down, with two Smashes

46 CRASH COMMS
Get into *Shades*

61 NICK ROBERTS'S PLAYING TIPS
Bruiser Nick helps you bash those baddies in *Platoon*, *Thundercats* and *U.C.M.* to name but a few

71 TECH NICHE
Jon Bates explains MIDI and Simon N Goodwin solves a few storage problems

82 ON THE SCREEN

90 LUNAR JETMAN

96 CRASH READERS' CHARTS

98 ROBIN CANDY'S SCORES

116 PREVIEWS
I can't wait . . .

120 ET AL
What your video recorder can expect, and a newspaper for youngsters

DO IT YOURSELF

68 GO FOR A DRIVE . . .
. . . in a Land Rover with Elite

77 WE WANT TO KNOW . . .
. . . and only you can help in the CRASHtionnaire

87 PLEASE, TAKE THEM . . .
. . . we just have to get rid of 1001 prizes

122 DON'T CALL US . . .
. . . draw a pirate ship and one of our cordless phones

Ocean's Paul Patterson as he collected the trophy for being The Best Software House of 1987

They packed the streets, they waited in anticipation for it was coming soon. They didn't know when it was coming or what it would be like – only that it would arrive . . . Some camped in the fields other just lay in the road, they weren't going to miss it – no way! Some knew all about it though. They knew nearly all about it. When it was coming, how much it would be – they even knew that it wouldn't come out of the drains, as first expected. They knew the next CRASH would be on sale April 28.'

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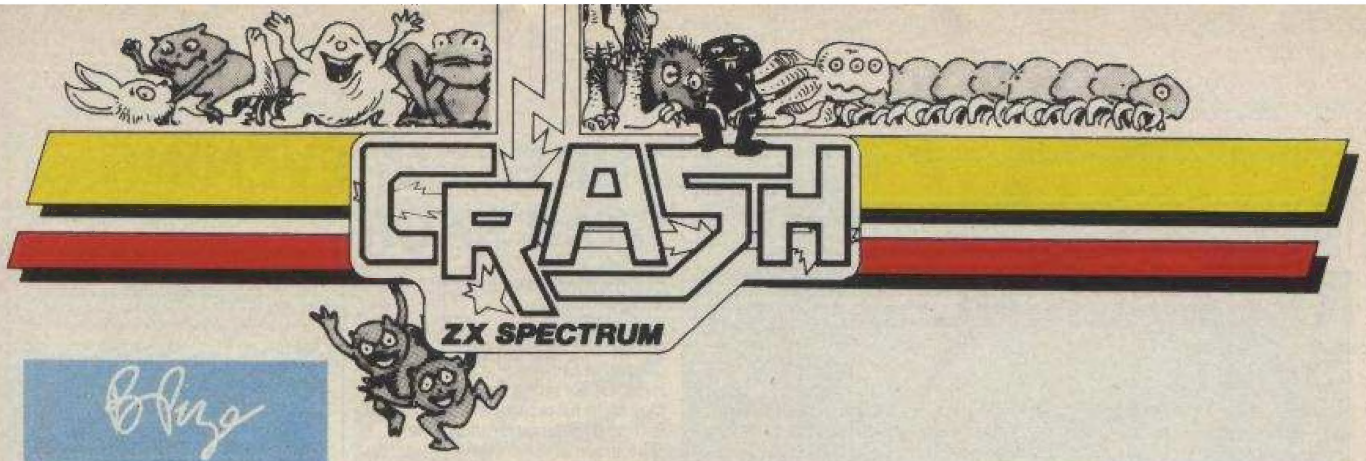


Last issue I exclusively revealed the stunning truth behind CRASH editorials: they're written at the last minute and flow from desperation. Well, this is no exception: it's written in my final minutes at CRASH, which makes the last days of the Roman Empire seem like a Microfair, and I'm sure everyone's desperate to see me flow away.

There's no room to wax nostalgic – and Philippa Irving would scratch it with her combat boots anyway. But (in the tedious tradition of Oscar-winners) I'll just thank a few people. Well, half the population of Ludlow: all the unsung heroes and heroines of CRASH. (When did you last hear a hero *sung*? And have you noticed how *everyone always* thanks the unsung heroes and heroines, to the point where they must feel like *Oklahoma!*?). Markie, Wayne, Roger, Oli, David, Tortoise Shell Press, everyone in photography and film planning and printing and accounts and advertising, Fran and Glenys who type letters, Karl who takes them to the Post Office – the magazine would never be produced without their work and Patience, yet they miss out on the boldface bylines.

I'm off to join the unsung heroes – it's coming on already, I have this overwhelming impression of being a *South Pacific* doctor and slave over a hot make-up screen at *Computer News* magazine.

So, I'll take a last look at little Ludlow, its thousand minarets glimmering in the twilight . . . give my regards to Broad Street . . . and hand over to . . .

Oh, that'll be me. Steve Jarratt's the name. Some of you may recognise me from ZZAP! where I have been working formerly as a reviewer, and latterly as assistant editor to my very good friend Julian Rignall, for the last 13 months. Just in case you're the slightest bit interested, I come from Tividale in the Black Country (West of Birmingham), have a degree in Chemistry (a fat lot of good *that* did me!) and I'm 22 (OK, so I lied: I'm 25).

My interests lie heavily in science fiction, films, computer games (surprise, surprise) techno stuff and music (favourites: Rush, Peter Gabriel, Genesis, UK – even though I can't get hold of the albums!).

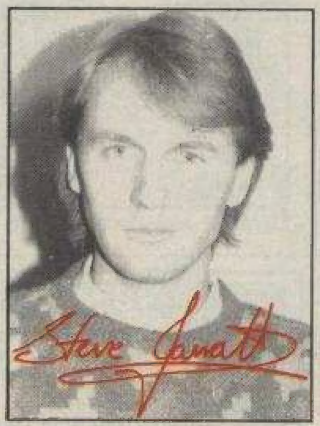
We also have two other new names appearing this issue, the first of whom is 23 year-old Katharina Hamza. Kati is of Austrian/Egyptian descent (I kid you not) and originally hails from Vienna. Complete with English degree and a wide knowledge of computer games, Kati will be acting as reviewer and adding a dash of intellectual glamour to this drab old office.

The second new reviewer takes the lumbering form of Mark Caswell, from Aberystwyth. Mark is a keen computer gamer and has a wide range of experience across 8- and 16-bit games; I'm sure you'll find his opinions most helpful. Mark is 23, big and not of Austrian/Egyptian descent.

I know you will all be pleased to hear that CRASH is once again the biggest-selling computer magazine in Britain, just pipping *C&VG* to this coveted title. Our circulation is currently hovering below the 91,000 figure, which goes to show that the Spectrum market is certainly NOT in a decline. Good news indeed!

More good news is to be had for all those of you who spend hours and hours sweating over computer and arcade games to get that legendary highscore. Newsfield, in conjunction with US Gold, the National Association of Boys Cubs and Montbuild, have instigated the first National Computer Games Championships. Interested? For the lowdown on the highscores, stroll on over to page 92.

'Till next month.



REVIEWS

April's auspicious

SMASHED!

12 ***CYBERNOID***
Exolon author, Raffaele Cecco, produces his best game ever!

42 ***GUILD OF THIEVES***
Have you got what it takes to become a member of the guild

42 ***JINXTER***
Magnetic Scrolls have all the luck

HOT SHOTS 75% and over . . .

80 ***ARKANOID – REVENGE OF DOH***
The best bat 'n' ball release yet?

108 ***BEDLAM***
Can you pass the academy's test in GO!'s latest frantic shoot 'em up

76 ***IKARI WARRIORS***
The long awaited Elite game meets with mixed reactions

24 ***RASTAN***
The violent return of Imagine

10 ***STAR PAWS***
It's a dog's life in the budget market

FULL INDEX

106 ***Arkanoid – Revenge Of Doh*** Imagine
109 ***Basket Master*** Imagine
108 ***Bedlam*** GO!
11 ***Black Lamp*** Firebird
18 ***Blood Valley*** Gremlin Graphics
100 ***Championship Sprint*** Electric Dreams
12 ***Cybernoid*** Hewson
107 ***Demon's Revenge*** Firebird
43 ***Federation*** CRL
23 ***Frightmare*** Cascade Games
110 ***Grand Prix Tennis*** M.A.D.
42 ***Guild Of Thieves*** Rainbird
104 ***Ikari Warriors*** Elite
101 ***Impact*** ASL
42 ***Jinxter*** Rainbird
44 ***Loads Of Midnight*** CRL
20 ***Magnetron*** Firebird
14 ***POD*** Mastertronic
100 ***Predator*** Activision
24 ***Rastan*** Imagine
103 ***Rockford*** M.A.D.
20 ***Shackled*** US Gold
18 ***Side Arms*** GO!
110 ***Spore*** Bulldog
10 ***Star Paws*** Software Projects
19 ***Teladon*** Destiny
25 ***Thing*** Players
102 ***Xarax*** Firebird
61 ***Yeti*** Destiny
25 ***Zolyx*** Firebird

IN THE NEXT CRASH

- **ATEI SHOW REPORT** – apologies are due for the ommission of the report on the 44th ATEI show from this month's contents. Next month, the report will be here in all its glory – honest!
- **TIPS SECTION SPECIAL** – Nick Roberts has his work cut out when CRASH features a 16-page tips supplement, bulging with hints, tips, POKEs and maps
- **CRASH CHALLENGE** – the challenge returns once more
- **COMPILATIONS** – a round-up of games anthologies
- **ON THE SCREEN** – more pixelated pictures
- **AND PAGES AND PAGES OF TIPS AND REVIEWS**

It's all in CRASH Issue 52, on sale Thursday April 28

ADVERTISERS INDEX

Activision 28, 102-103, 119
Barclays Bank 45,47
Cascade Games 66-67, 88-89
Communications & Media 111
CRASH Mail Order 55
CRASH Hypermarket 94-95
Database Software 105
E & J 31
Electronic Arts 26-27
Elite Systems 2-3
THE GAMES MACHINE 32
GO! 70, 86
Grand Slam 33
Gremlin Graphics 34, 56, 76
Hewson 9
Imagine 21, 99
Incentive 29
KJC Games 40
Lerm 73
Miles Gordon Technology 107
Ocean 6, 16, 22, 49, 60, b/c
Outlaw 80-81
Rare 31
Romantic Robot 112-113
Specsim 53
US Gold 14-15, 39, 59, 79, 91, 123
Woolworths 4
WTS Electronics 30
ZX Guaranteed 8

N·E·W·S

THE MAGNIFICENT 5+2?

Citroen and Clive Sinclair are likely to join forces in a deal set to take the motor industry by storm. The innovative designs of the battery powered C5 and internals of the 2CV are to be combined in a unique attempt to create a motor car for the more ecologically-minded consumer. The last old-style 2CV rolled off the production line late last month; all along its slow speeds and homely looks have appealed to the more environmentally concerned motorist (2CVs and Greenpeace stickers often go together). Following extensive market research, the manufacturers have expressed an interest in creating an even more ozone-friendly vehicle, and the C5 with a small unleaded petrol engine – a compromise to give the car more power – seemed an ideal candidate. The first 2CV5s (only a provisional name as yet) are likely to go into production late next year. The alternative car will be significantly cheaper to produce and run; the Department of the Environment has even suggested the possibility of a reduction in road tax.

THREE DISKS

THE BUDGET label **Alternative** is making several of their games available on disk. Each will have three popular titles and retail at £6.99. The first, *Sportacular* is released on 23 February and features *Soccer Boss, Olympic Spectacular* and *Indoor Soccer*.

CDS Software have re-programmed the successful *Colossus 4 Chess* and *Brian Clough's Football Fortunes* (42% Issue 38) specifically for the +3. They are priced at £14.99 and £12.99 respectively.

EASTER COMPILATIONS

OCEAN is releasing a compilation game pack in time for the Easter holiday. *We are the Champions*, available from 17 March, comes in a twin cassette gift box for £9.95. The games included will be **System 3**'s *IK+* (91% Issue 49), **Activision**'s *Rampage* (69% Issue 49), **Imagine**'s *Renegade* (89% Issue 44), **Palace Software**'s *Barbarian* (85% Issue 41) and **Electric Dreams**' *Supersprint* (58% Issue 46).

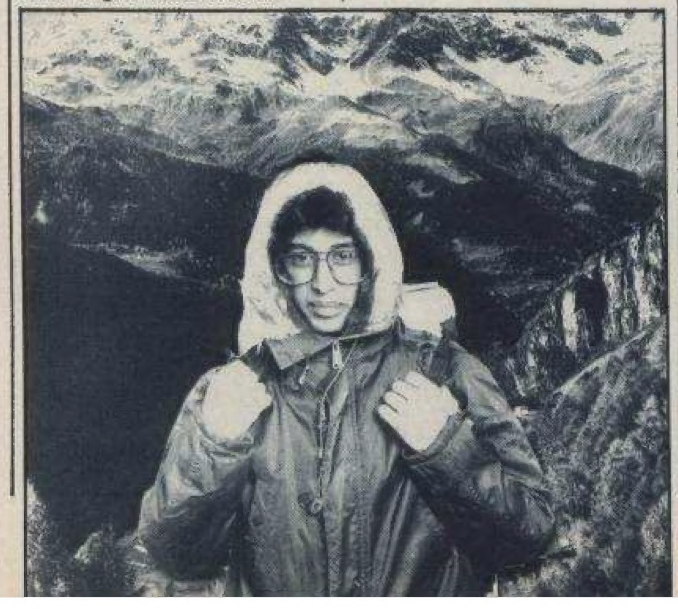
Databyte's latest release is *The Spy Trilogy* – a compilation of *Spy vs Spy* (93% Issue 19), *The Island Caper* (53% Issue 41) and *Arctic Antics* which has never been released on the Spectrum before. The trilogy is produced under licence from **First Star Software Inc**, USA and will retail at £9.95 on cassette and £14.95 on disk.

DESTINY OF THE YETI

DESTINY SOFTWARE are running a competition in connection with their first release *Yeti* (61%, page 17), and the winner could receive up to £30,000.

In the wake of a recent Russian expedition which came within 30 yards of the legendary creature, Chris Bonington is organising a search which is probably the most comprehensive yet. The bookmakers William Hill are giving odds of 150-1 against discovering the fabled beast and Destiny have laid on a bet of £200. If the expedition is successful, the winnings are to be use as first prize in their competition.

To be considered for this mammoth reward, entrants should send a postcard with a description (50 words maximum) of what they think the Yeti will look like, to Destiny Software, *Lamerton House, 23 High Street, Ealing, London W5 5DF.*



THE GREAT EVENING STAR RACE

IN CONJUNCTION with *Railway World Magazine* and The Great Central Railway, **Hewson** are launching a competition centred on the steam simulation *Evening Star* (53% CRASH Issue 45). By racing the clock, keeping a log of the full record run attempt from Bath to Bournemouth and taking a photograph of the screen on completion, you could become one of the finalists to compete in the Grand Play-Off at Loughborough Great Central Railway on 25 June 1988.

Prizes include dinner for two on the Charnwood Forester evening wine and dine train and passes to the Great Central Enthusiasts Day in July.

Entries should be sent to Ian Allen Limited, *Coombelands House, Weybridge, KT15 1HY* by 30 April 1988 (first post).

CRASH READERS' AWARDS 1987

JERSEY, March 12, the Hotel de France, site of the Newsfield organised **Computer Arena 88** – a software industry conference, the first of its kind ever to be held in Britain – was also the moment when the CRASH and ZZAP! Readers' Awards were presented.

Details of the awards can be seen on page 57, but here are a few pictures from the presentation. The awards were handed over by Newsfield's Managing Director, art supremo Oliver Frey.

***Driller* swept the board, and kept Incentive's Ian Andrew on his feet all night**

Gary Bracey receives the CRASH Award for Best Arcade Adventure (*Head Over Heels*)

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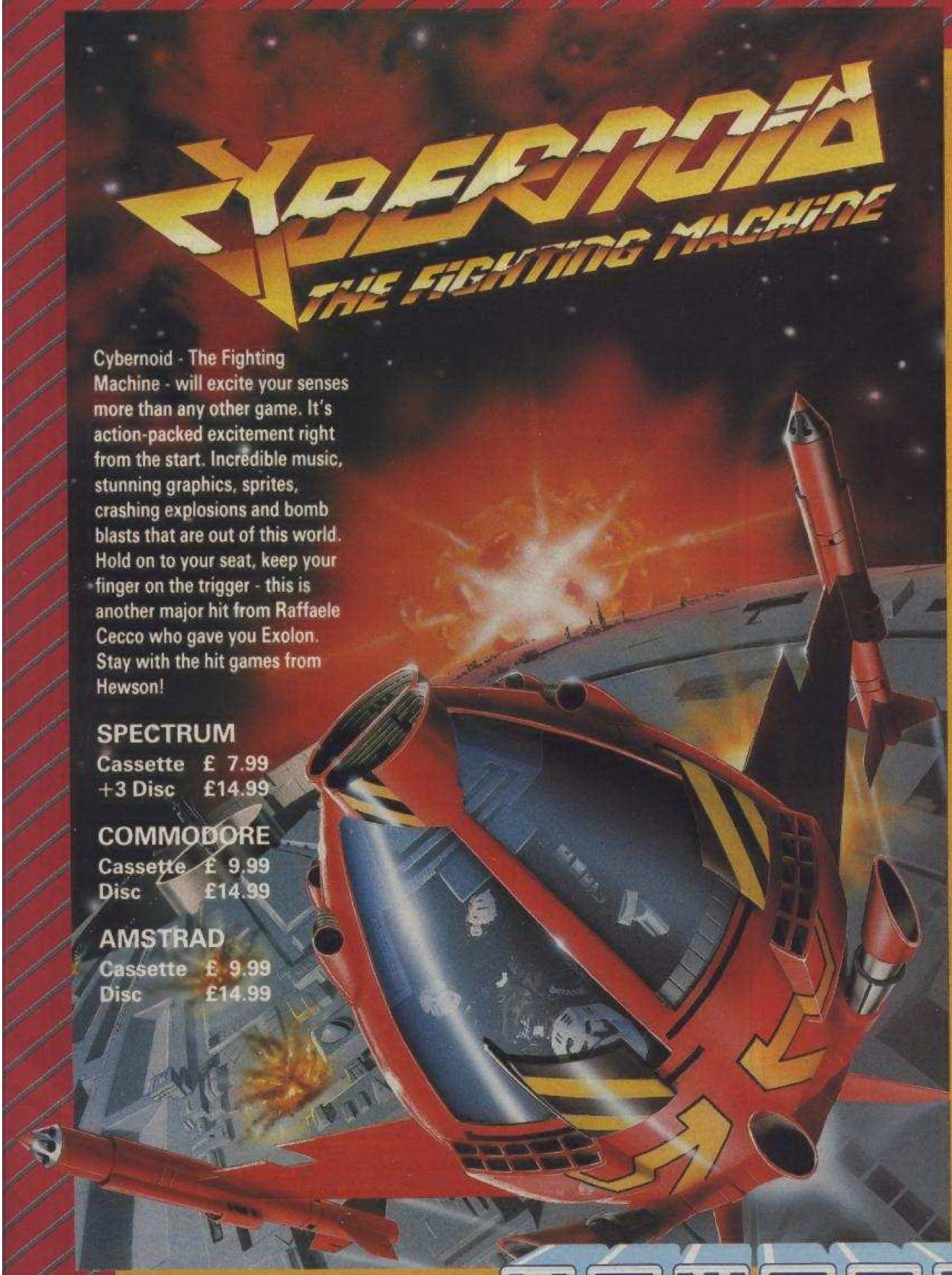
CYBERNOID
THE FIGHTING MACHINE



Cybernoid - The Fighting Machine - will excite your senses more than any other game. It's action-packed excitement right from the start. Incredible music, stunning graphics, sprites, crashing explosions and bomb blasts that are out of this world. Hold on to your seat, keep your finger on the trigger - this is another major hit from Raffaele Cecco who gave you Exolon. Stay with the hit games from Hewson!

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STAR PAWS

Producer: **Software Projects**
Retail price: **£2.99**
Authors: **Software Creations**

The Tasty Space Griffin has been acclaimed as a galactic delicacy for many years. After being hunted to the edge of extinction, it has subsequently become very rare, and thus very valuable – to the point of forming a highly prized unit of intergalactic currency.

Now, on a distant planet, a band of unscrupulous crooks are breeding the Griffins in an attempt to flood the market, destabilise the monetary system of the whole universe and allow them to seize power in the ensuing chaos.

No problem: send for Captain Neil Armstrong. He'll soon sort them out. Well, he would have done, but for an error in the astro telex. Instead of sending for the clean-cut hero, the garbled message asked for the Inspector Clouseau of the Starfleet Taskforce – the bungling Rover Pawstrong.

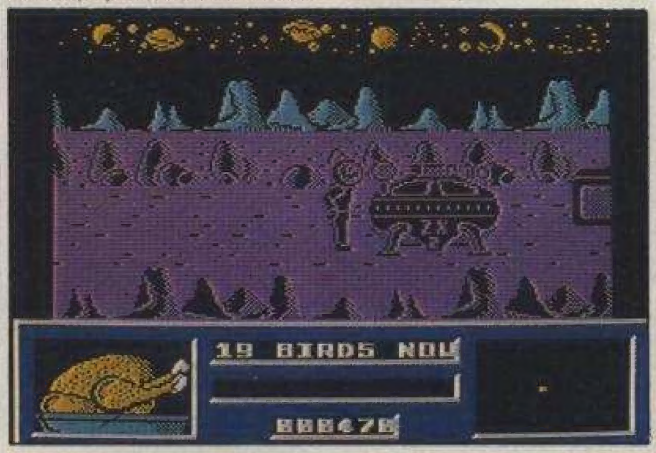
Transported to the crooks' hideout, Pawstrong has to kill or capture all the Griffins there to complete his task. To aid him, a Starfleet ship occasionally drops supplies, consisting of explosives, transporters, rockets, and missile launchers, all of which help him to apprehend the runaway birds. A bonus slide puzzle is also available, completion of which is rewarded by extra points.

Energy is one of Rover's biggest problems, represented by the lightly roasted Tasty Space Griffin in the bottom left-hand corner of the display. As Rover's lifeforce ebbs away, bits of flesh disappear to leave the bony carcass beneath. Failure to find food to quieten his rumbling tum results in a pile of bones, and one very dead Rover.

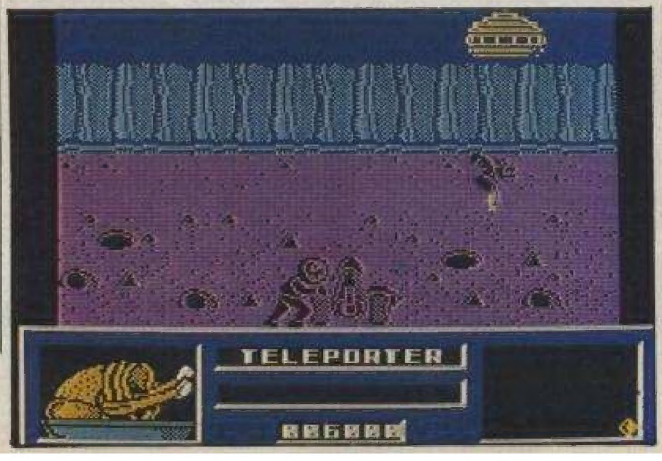
Once he has either captured or zapped a Griffin, a Starfleet scoutship lands and takes it off of his paws. This leaves Rover free to chase the remaining elusive fowl across the planet, and also under it, by using the mining tunnels entered by leaping down the nearest shaft. A map and mining lamp can be collected to help him to make light of the situation.

Such is the task that Captain Rover Pawstrong finds himself lumbered with. Let's hope he doesn't make too much of a meal of it . . .

► Underground, overground, wandering free . . .



► Watch the birdie



MARK

" It's a dog's life for poor old Rover Pawstrong. Sent to a desolate planet to capture those priceless birds, is he dog enough to manage it? Star Paws is quite fun to play, using all of the varied weapons and contraptions to outwit the speedy Space Griffins. I must admit that they do look very much like distant relatives of that other turbo-charged bird, the Road Runner, and like the Coyote in that famous cartoon, Rover (aka the player) has a very hard time trying to catch the Griffins. The bonus puzzle is a nice idea, but with the pressure of the time limit and difficulty of co-ordination, the bonus is quite an elusive prize! This amusing and fun collect-'em-up is certainly worth the small asking price. "

NICK

" I really enjoyed Star Paws when it came out on the C64 and it hasn't lost any of its addictiveness in conversion to the Spectrum. The graphics are all well drawn with cartoon-style characters and detailed backdrops. There's a decent soundtrack that plays constantly in the background and some sound FX, but with both going at the same time it can get very irritating. Star Paws really has plenty of variety: if you go down one of the many holes with a mining lamp on, you enter into a completely different sub-game with a maze of tunnels and special objects to collect; if you pick up the bonus puzzle, you get a sliding picture game to complete for a bonus. The gameplay is made tough at first because you have to let go of the direction keys to jump. This is soon mastered, though, and merely adds to the game's challenge. Star Paws is a very enjoyable arcade game that has survived the conversion from the Commodore very well. "

KATI

" As a budget game Star Paws is extremely good value for money. The cartoon humour of the canine Captain's dilemma is very engagingly portrayed – especially the legendary Tasty Space Griffins. The surface and underground locations, the vast arsenal of helpful items and the bonus puzzles make for some exciting and varied gameplay. Defeating the dastardly birds with the appropriate weapons becomes an interesting test of dextral skill – there's no way you can simply outrun them. There are a couple of minor drawbacks: the parallax scrolling is slightly jerky and manoeuvring Pawstrong into the appropriate position to collect equipment from the boxes is slightly more awkward than it needs to be. These certainly shouldn't dissuade you from buying the game, though, which at £2.99 is one of the most attractive bargains around. "

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: Captain Pawstrong is a superbly drawn and animated cartoon character – combined with the many varied and ornate backgrounds *Star Paws* is a delight to watch
Sound: an irritating title tune with functional spot effects
General rating: a delightfully cute and humorous game to play. With such addictive qualities, at only £2.99 it shouldn't be missed!

Presentation	75%
Graphics	68%
Playability	77%
Addictive qualities	75%
OVERALL	**77%**

BLACK LAMP

Producer: **Firebird**
Retail price: **£7.95**
Authors: **designed by Graham Everett and Steve Cain, programmed by Software Creations**

Jack the jester's lot is not a happy one, he observes as he trudges out on an impossible mission to find nine enchanted lamps. The problem is he's in love.

Well, it's not actually being in love that's the problem, it's that his loved one is the king's daughter, Princess Grizelda. And the king is more than slightly peeved at Jack's interest in his daughter; after all, who wants someone who wears silly hats and hits everyone with a pig's bladder for a son-in-law?

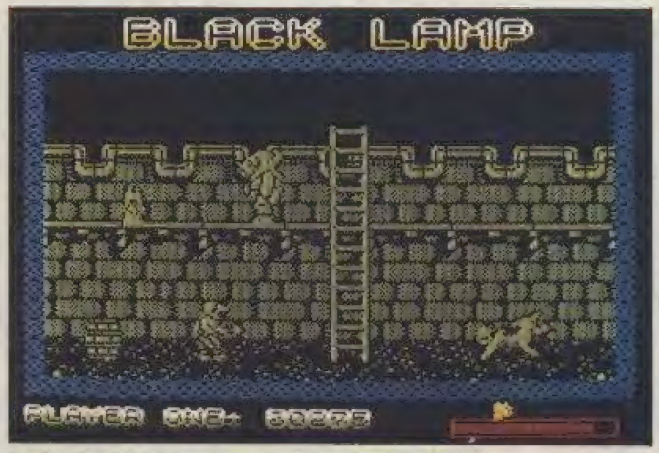
So King Maxim has decided to get rid of Jack by sending him on a crusade to retrieve these nine lamps, including the revered Black Lamp of Allegoria. Once safely housed in the castle treasury, the lamps were stolen, and ever since the Kingdom of Allegoria has been plagued by strange and unearthly creatures.

Jack sets out after consulting his friend Pratweezle the sorcerer, who endows him with two magical powers: recuperation (allowing him to cheat death a few times), and energy bolts which Jack can fire from his belt buckle.

And the buckle-dusters come in handy on Jack's travels as he encounters witches, crows, goblins, werewolves and – the archnasties of them all – dragons. Energy lost in being beaten up can be replenished with food and drink, and other collectible objects include shields and weapons.

Once each lantern is found, it must be taken to a chest (there are 20, all around the land of Allegoria). Each chest has nine compartments, each one a different colour. Jack has to place each coloured lantern into its correct compartment – and defeat a fierce dragon to get at the eponymous black lantern.

Once the lanterns have been returned to their rightful places, peace and tranquillity will return to Allegoria. And, as in all good stories, Jack will get to marry the beautiful princess.



► **Great pig's bladder, shame about the playability:** *Black Lamp*

PAUL

" Black Lamp is most unplayable. Jolly Jack takes ages to respond to frantic movements of the joystick or keyboard, which is infuriating in such a fast action game. And because of poor game design most of your precious time is spent retracing the jester's footsteps back past the same old enemies over and over again.

But the simple game would be very addictive if it weren't for that. And the graphics are competently animated and well-drawn (though not very original), ranging from simply-drawn houses to magnificent mansions. Despite the slow-moving sprite, Black Lamp is mildly effective. "

MARK

" At first glance Black Lamp looks interesting. The high-score-table picture is impressive – especially the two flickering lamps flanking the day's high scores – and the graphics are OK, with a porky little sprite wobbling around nicely-drawn backgrounds.

His movements are very sluggish, though, and after a few games Black Lamp becomes boring. There's too much wandering around to find the action, and when you do it's usually just shooting creatures. Black Lamp is a barely average collect-'em-up – it looks bright, but the lantern of interest soon goes out. "

KATI

" Jester Jack is an attractive little fellow, jigging through the countryside with his pig's bladder, and the monochrome magic kingdom is well-drawn, with enough detail to get you interested and plenty of scope for exploration.

Zapping wicked witches and wailing werewolves with one hand while grabbing the odd chicken leg to fill your ever-rumbling belly is quite fun in its way, and Black Lamp is very playable at first – but there's no challenge to keep you going back for more.

However cute the jolly jester and however attractive the felling of grumpy goblins, the gameplay just isn't difficult enough. Even the dragon which jealously guards the black lamp on each level doesn't offer much opposition; it takes only a few shots to make the dastardly demon disappear in a disappointing flash. "

► **'Zapping wicked witches and wailing werewolves with one hand, grabbing the odd chicken leg with the other . . . '**

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: slow animation against a wide range of detailed backgrounds
Sound: superb 128K title tune
General rating: *Black Lamp* looks great, but there's not much game to play

Presentation	75%
Graphics	66%
Playability	48%
Addictive qualities	54%
OVERALL	**57%**

Producer: **Hewson**
Retail price: **£7.99 cassette, £14.99 disk**
Authors: **Raffaele Cecco and Nick Jones**

C·Y·B·E·R·N·O·I·D·

A CRASH Smash

Evil pirates have ransacked the Federation's storage depots, stealing valuable minerals, jewels, ammunition, and the latest in battle weaponry. The player takes the part of the brave Cybernoid, picked to retrieve the valuable cargo and destroy the pirate hoard.

Apart from human adversaries, the Cybernoid also has to battle his way through the planetary defence system that the dastardly pirates have activated in order to stop the hapless hero from completing his mission. Add to that the time limit imposed on returning all the cargo for each level, and it can be seen why only the brave – or the foolhardy – volunteer for these tasks.

The Cybernoid isn't entirely defenceless, though: apart from the standard lasers, his arsenal also consists of bombs, mines, shields (used to provide limited invincibility), bouncing bombs, and heat-seeking missiles. Needless to say that stocks of these items are limited, although collection of the yellow canisters occasionally dropped by pirate ships increases the currently selected weapons stock by one.

Other items that may be collected include the Federation's stolen booty, objects that alter the appearance of the player's craft and extra external weaponry that can be used on the more difficult screens.

As the Cybernoid travels through the pirates' flick-screen territory, he is hampered by their activated defence systems. These take the shape of gun emplacements, missile launchers and so on – tricky to pass, but easily eliminated with the extra weapons.

Once a level has been cleared and the cargo collected, the Cybernoid then heads for the level depot, where he is informed whether or not he has collected enough cargo to warrant being given a bonus. If not, one Cybernoid ship is lost, and the player is transported to the next level.

" Fantastic! Who needs 16-bit machines when Hewson and Raffaele Cecco can produce games like this on the 8-bit Spectrum. Cybernoid is perfect in every way that a computer game should be: it has excellent sound, excellent graphics and excellent colour. In fact I cannot find anything wrong with it at all! The animation is the best I've seen for a long, long time, and the way you can add equipment to your ship to make it stronger is great, too. The backgrounds are all well drawn, as are the sprites. Understandably there is some colour clash but this is bearable and even adds to the effectiveness of the explosions. There's a good 128K tune constantly playing in the background and the special FX make it sound even better. As I've said before, it's the little extra touches that make a game enjoyable to play, and Cybernoid has plenty of these: volcanoes, animated cannons, and scrolling borders all make the game pleasing to the eye. Well done Hewson: the ultimate Spectrum arcade game! "
NICK

" Cybernoid: the sensational mean fighting machine, collecting cargo and firing bombs – the idea isn't exactly unusual but the slickness of its presentation certainly is. The graphics, reminiscent of Exolon and Starquake, are extremely colourful; the destruction of each Cybernoid ship is accompanied by an explosion so spectacular it's almost worth losing a life to watch the effect! The nasties are numerous and have some engaging characteristics: I particularly liked the wriggly caterpillar that carries on squirming even after most of its segments have been blown away. Immediately playable, Cybernoid gets gradually more and more difficult. After a while, progress inevitably becomes a matter of sacrificing a life to find out how to negotiate new screens. The gameplay, complemented by the atmospheric music, grows very addictive. Calling Spectrum owners everywhere - this is one version of a well established theme that it would be a pity to miss. "
KATI

" An arcade game in your own home – you'd better believe it. Cybernoid is one of the most addictive, playable, attractive and downright unbelievable games you're ever likely to meet on the Spectrum. All the points that people used to criticize on the Spectrum could *never* be levelled at Raffaele Cecco's latest masterpiece. The graphics are astounding – fantastic use of colour and amazing detail. The (optionally) constant sound on the 128K complements the game superbly. Cybernoid sure is one helluva fighting machine – the weapons available are mean and monstrous, making the action really compulsive. Cybernoid defies all adjectives; it just has to be played to be believed – and once you do play it, you'll never leave it. If only all Spectrum games were like this! "
PAUL

COMMENTS

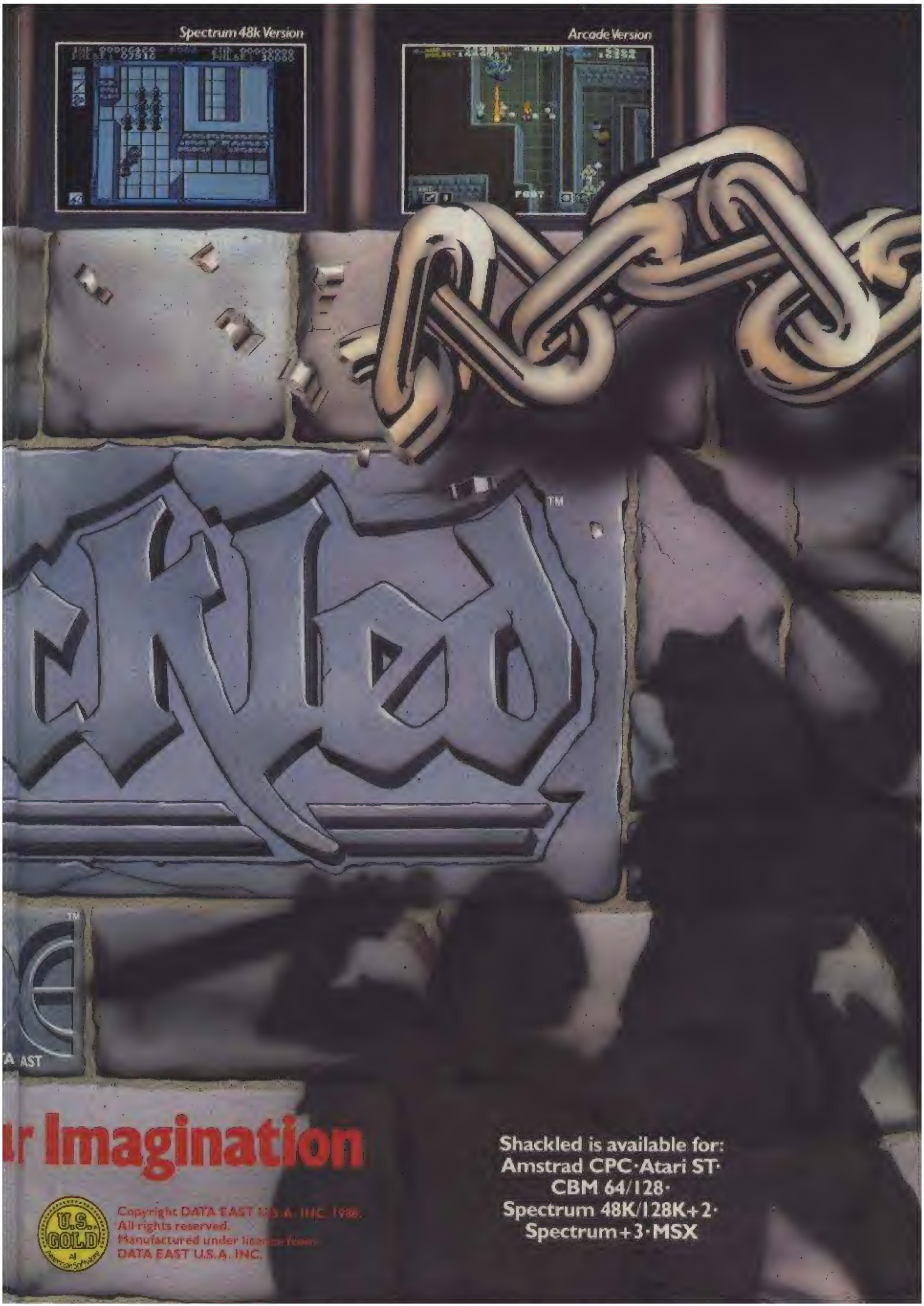
Joysticks: Cursor, Kempston, Sinclair
Graphics: *Cybernoid* is so colourful and detailed you'd be forgiven for thinking it was an arcade version
Sound: an amazing 128K in-game tune, as well as some impressive spot effects
Options: sound on/off
General rating: the formula may be old, but everything else is new or improved. Raffaele Cecco's best game to date – if only it were bigger!

Presentation	93%
Graphics	96%
Playability	95%
Addictive qualities	96%
OVERALL	**96%**

Atari ST Version

Unchain your

Your friends are prisoners within the mysterious castle. Release the fetters that bind them and chain them to yourself, only then can you make your escape. Release as many as you can for their predicament is dire, though the more you have on your chain the slower your progress will be! Defend yourself with a choice of 6 different weapons! Battle your way through 112 stages of gripping continuous action! Defeat your foes, release your friends, escape from every stage only then is freedom yours!


Spectrum 48k Version
Arcade Version
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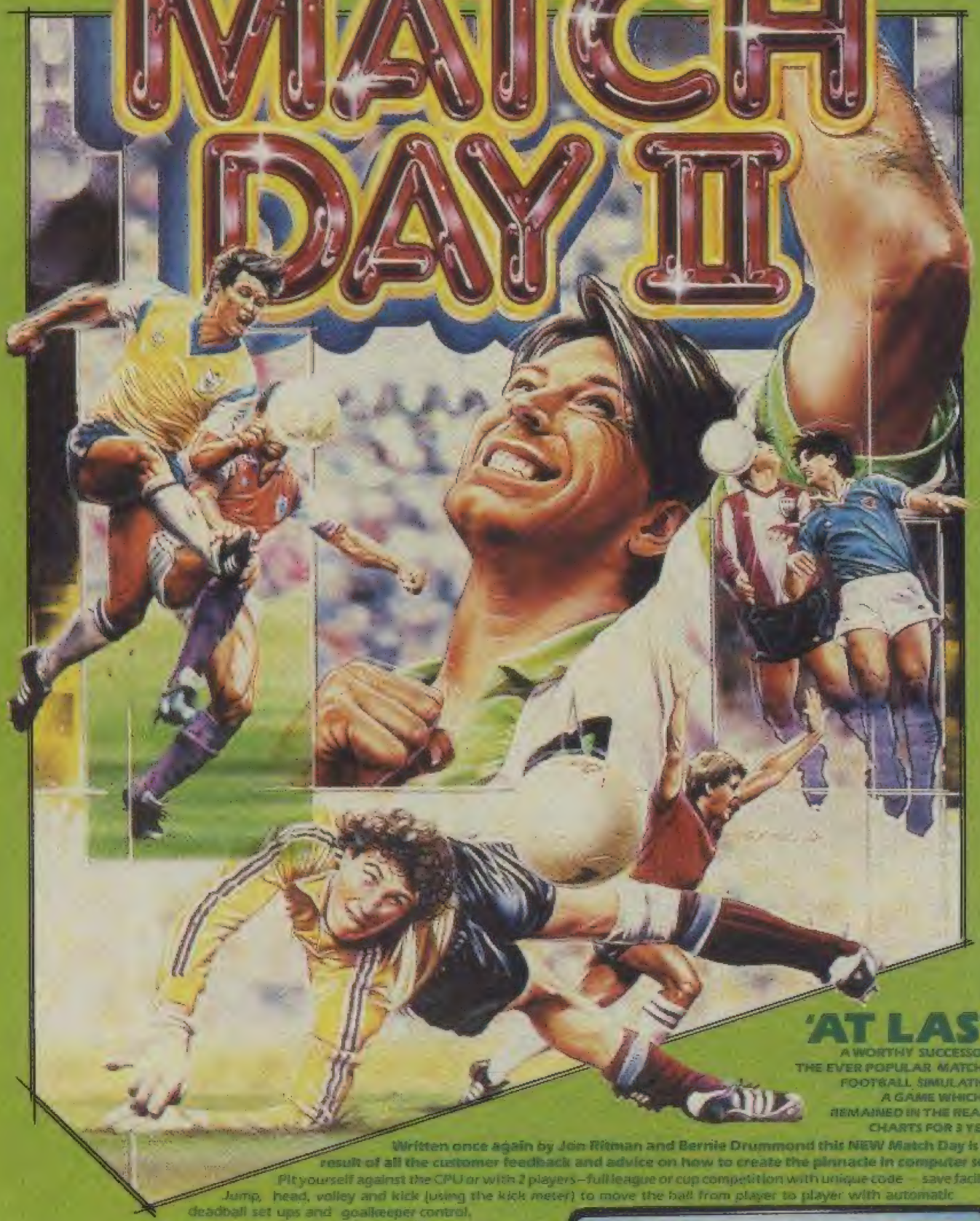
MATCH DAY II



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Jump, head, volley and kick (using the kick meter) to move the ball from player to player with automatic deadball set ups and goalkeeper control.

DIAMOND DEFLECTION SYSTEM™ ensures realistic ball ricochet and the action comes with full music and sound FX.

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YETI

Producer: **Destiny**
Retail price: **£8.95**
Authors: **Christian Urquhart and Mike Smith**

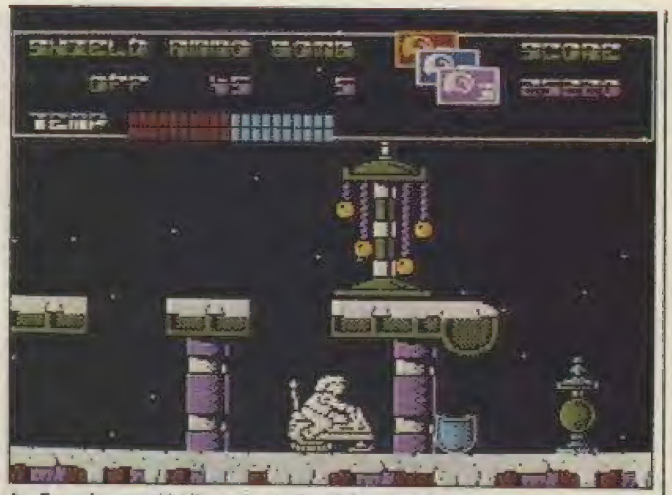
The Abominable Snowman, mysterious subject of Tibetan legend and myth, has been granted the ultimate accolade of a computer game of his own. In this case there is no speculation as to whether the notorious Yeti exists or not; he tramps across the title screen to assure the player of his existence. The object of this game is to catch him.

The Yeti is extremely shy, and the largest part of the quest involves travelling through uncharted territory to find the beast. Beginning in the midst of hostile oriental caverns the search moves on to counter the perils of the snowy landscape. Buddhas, invincible mini-monks, rivers of fire and mystical flying monsters impede your progress: contact with any of these means instant death.

To counter these dangers, the player is armed with the famous Lee Enfield rifle and a limited supply of grenades; extra ammunition and shields are also scattered around the environment. However, the important problem in the punishing Himalayan climate is keeping the hunter's body temperature up. Earthenware pots full of valuable nourishment have been left around the area to help.

As progress is made further into the depths of each of the four levels, the option of a snow mobile becomes available. Miss the entrance to its garage, though, and the journey is continued on foot.

The end of each level brings the hunter to camp, where he can replenish ammunition and grenade supplies and grab the chance to restore his body heat before recommencing the search. Reaching the fourth level sees the Yeti come within the player's grasp. Catch him and the journey is complete. Fail and the Abominable Snowman will remain a mystery . . .



► For sale: one ski-bike, going to the highest buddah

NICK

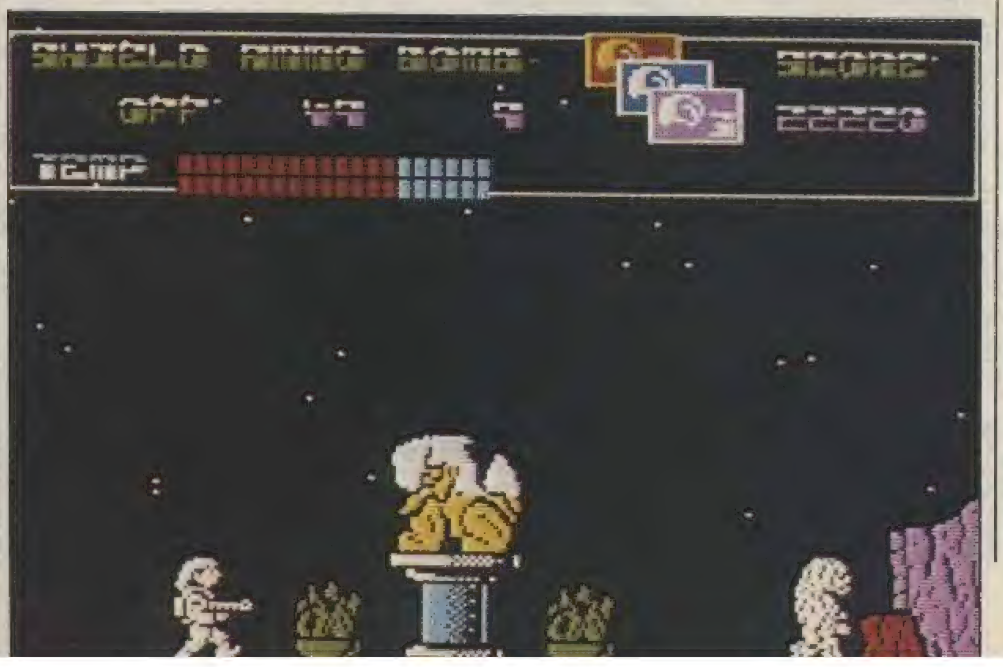
" Yeti is just an Exolon rip off! What Christian Urquhart has done is to copy the idea and layout of Hewson's fantastic game completely. The only real differences are the jerky animation and pathetic sound. The graphics look great but they move around the screen so poorly that they soon become annoying. Colour is used well on the fire and some of the nasties, but other objects in the game are all the same colour and become boring after a while. The way the score and amount of ammunition is displayed on screen is also terrible: if you want to quickly check on how many bullets you've got left it's impossible to work out which figure refers to what! If you've already bought Exolon then you've done the right thing because although they look alike, Exolon is ten times better. "

KATI

" Yeti is very reminiscent of Exolon, even down to the effect of some of the explosions. What saves this clone from obscurity is the unusual scenario, cleverly portrayed in some very colourful graphics. The pagodas and pillars of the Tibetan environment are atmospheric, and a lot of the game's appeal stems from the elusive figure of the shambling Yeti, rewarding you with the odd fleeting glimpse before he mysteriously disappears. The gameplay is more difficult than is really necessary at first: nasties come thick and fast and don't ease up when you reach the edge of the screen. If a fireball appears at this point you have no chance of avoiding it; traversing from one screen to another becomes as much a matter of luck as skill. Collision detection is tight, and often clearly ducking a fireball is not enough to save your life (annoying when you only have three). These elements reduce Yeti's initial playability but with such high quality graphics and some compelling gameplay a little persistence should go a long way. "

MARK

" I must admit that the idea of a Yeti hunt in a game is quite novel – well I for one haven't heard of it before. Chasing the Yeti across the frozen wastes of Tibet is fun, especially as the route is filled with many dangers. These include large spikes, gun turrets and a multitude of aliens that whizz around the screen causing a great nuisance. Graphically the game is good, with some nicely drawn and animated obstacles – especially the large Buddha statues that spit lightning bolts at you. My only gripe is that the game is hard to play, and many of my early attempts hardly took me further than the first couple of screens; I feel that this may put some people off very quickly. Okay, the game isn't anything special – basically a shoot and collect 'em up – but it is fun to play. "



COMMENTS

Joysticks: Kempston, Sinclair
Graphics: the snowy background is a great effect, adding atmosphere and realism to the game
Sound: pathetically feeble
General rating: Destiny have played very safe with their first game – nothing new, but nothing too bad either

Presentation	57%
Graphics	66%
Playability	61%
Addictive qualities	56%
OVERALL	**61%**

SIDE ARMS

Producer: **GO!**
Retail price: **£8.99 cassette, £12.99 disk**
Authors: **From a Capcom arcade machine**

Bozon, the tyrannical megalomaniac, is threatening to exterminate the Earth. Immediate retaliatory action is necessary and so Lieutenant Henry and Sergeant Sanders are assigned to the mission. Their aim: to infiltrate Bozon's underground empire, locate the enemy's ultimate weapon and destroy it.

Converted from the arcade game, *Side Arms* allows one or two players to participate in combat across a variety of horizontally scrolling monochrome backgrounds.

Immediately the enemy unleashes its defence: all available manpower is alerted and combatants appear in a variety of forms to do battle.

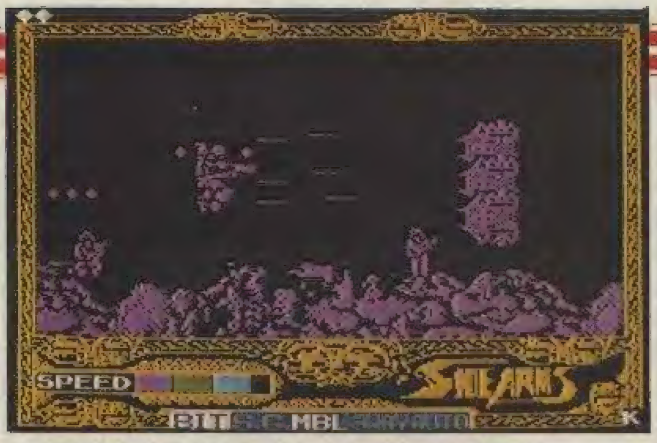
As the intrepid astronauts advance, they have the chance to improve their cache of weapons. When destroyed, some enemies leave collectable bonus pods. Basic pods increase fire power and improve armour but each also contains a series of additional battle improvements. A specific number of shots transforms the pod into another weapon; one shot for increased speed, four for a mega bazooka launcher, and so on. The weapons in a player's arsenal can then be selected individually from the keyboard.

Play is divided into a series of stages. At the end of each, enemy fire culminates in a laser-belching monster, who must be defeated to allow entry to the next underground level.

The game comes complete with its own soundtrack intended, presumably, to inspire you as you approach Bozon's ultimate weapon, the Mobile Armour Sentipet.

CRITICISM

● " Another shoot 'em up conversion fails to hit the mark. Strip away all the hype (this is definitely not a 'classic shoot 'em up'), take away the gimmicky soundtrack, and you're left with a rather average game. The action, far from being as breathtaking as the promotion claims, is slow. Even with maximum speed bonuses the astronauts don't seem to get very far and spend a lot of time travelling through empty screens. Scrolling is uneven and collision detection annoyingly inaccurate. The graphics are no more outstanding than the gameplay. The atmosphere they create can be quite eerie, especially against the black background but this element isn't really exploited to its full potential. *Side Arms* isn't a complete disaster – after a few turns it even becomes addictive, but at the inflated price it's probably best to give it a miss. "
KATI



► *Side Arms*, **top head, bottom legs . . .**

● **" On first investigation,** Side Arms **seems just like just another ordinary shoot 'em up game with appalling colour. On second investigation it's still just an ordinary shoot 'em up! The graphics are confusing, the colour is monochromatic and the sound is terrible. Some of the aliens are so small that you hardly notice them creeping up on you and others are just so big that you hardly stand a chance. The sloppy presentation makes the game look unappealing and addictiveness is almost nil. There are some places in the game that are quite pleasing to play – but not many. This game lets down GO!'s usually high standard. "**
NICK

● " *I'm afraid to say that I wasn't very fond of this game.* Side Arms

BLOOD VALLEY

Producer: **Gremlin Graphics**
Retail price: **£9.99**

The hunter and the hunted represent opposite sides of the same coin; *Blood Valley* gives the player the chance to savour the experience of both.

The Hunt is an annual contest which takes place in the Valley of Gad. The hunter is the tyrannous reptilian Archveult; his quarry is an unarmed slave released into the valley for the hunting pleasure of the malevolent ruler and his henchman.

The roles of hunter and hunted are designed for two players although there is a solo option. The player acting as the slave has three different characters to choose from. Thief, Barbarian and Priest are each given several objectives to complete prior to their escape. This involves destroying several of Archveult's primary allies and, in the case of the thief, stealing several specified objects.

Before the hunt itself begins, a map is displayed and Archveult stations his henchmen in positions that correspond strategically with his quarry's quest.

The movements of Archveult and his quarry against the various landscapes of the Valley of Gad are shown simultaneously on a split screen display. Unfriendly valley inhabitants, robbers, vampires, trolls and demons must be defeated by hand to hand combat. Food, gold and other collectable bonus objects boost stamina rating and increase bargaining power. When invoked, an options screen allows each character to use different potions and items.

Ordinarily Archveult pursues the quarry in his own person, but when the slave approaches any of his allies, Archveult takes control and fights on their behalf.

A scroll to the right of the screen displays the stamina level of both characters, distance travelled and amount of gold collected. The Hunt lasts five days and a clock displays the countdown.

CRITICISM

● " *Blood Valley* is intended to combine fantasy adventure with elements of role play and strategy. Unfortunately, once you've waded through all the explanations, you're confronted by nothing more than a sub-standard arcade adventure. Gremlin have tried to include so many elements that only the most basic ones – of killing and collecting objects – stand out. The objects, once you have them, seem to bring little benefit other than the dubious one of a prolonged life. The graphics are remarkable only for their inconsistency: objects and enemies appear and disappear at random. The scrolling, combined with a strange flick-screen procedure, is uneven and the weird, ghostly music can do nothing to resurrect the spirit of this barren and bitty game. "
KATI

► **Run for your life – now you're the hunted**

● **" After sitting through almost half an hour of loading you eventually find that the game wasn't worth the effort! The idea of slaying everything in sight is fun for a while and extra things like bribing trolls add a little spice, but the lack of a tense atmosphere and real variety soon kills any compulsion to continue. There's the choice of playing three different characters but if you load in one and don't like it you have to reload the entire game. If you want a good two player game then look elsewhere. "**
NICK

is pretty bland visually, with some large, but rather unimpressive monochromatic sprites battling across a very similar monochromatic backdrop. Control of the main character is frustrating, as he often takes a fraction of a second too long to react to a situation, which is more often than not fatal. Another thing that annoyed me greatly was the way that the aliens occasionally killed my man without even touching him. All of these factors added to my initial feelings about the game, and in the end I was left with a vague, 'why bother?' sort of feeling."
MARK

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: bland and monochromatic
Sound: terribly grinding and repetitive
General rating: a very poor and disappointing arcade licence

Presentation	45%
Graphics	44%
Playability	46%
Addictive qualities	43%
OVERALL	**43%**

● *"The packaging of* Blood Valley *is quite good, with a bed sheet-sized instruction leaflet that clearly sets out the aims of the game, but on the graphics and gameplay side – forget it. Visually the game is totally dire, with crudely drawn and badly animated stick men hobbling around a vile background. Gameplay is not much better, becoming repetitive and ultimately dull. I became totally bored of the whole caboodle after only a few attempts. Admittedly there is a game of sorts lurking around in there, but Gremlin will have to get a bigger shovel to try and dig it out."*
MARK

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: little characters with poor scrolling
Sound: hardly anything at all
Options: One or two players and a choice of three characters to play
General rating: one of very few sub-standard releases from Gremlin Graphics, at a very high price

Presentation	55%
Graphics	45%
Playability	43%
Addictive qualities	35%
OVERALL	**41%**

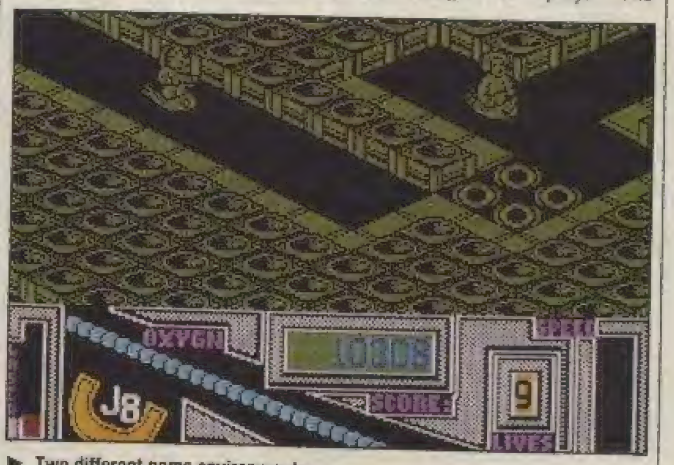
TELADON

Producer: **Destiny**
Retail price: **£8.95**
Authors: **Nick Eatock**

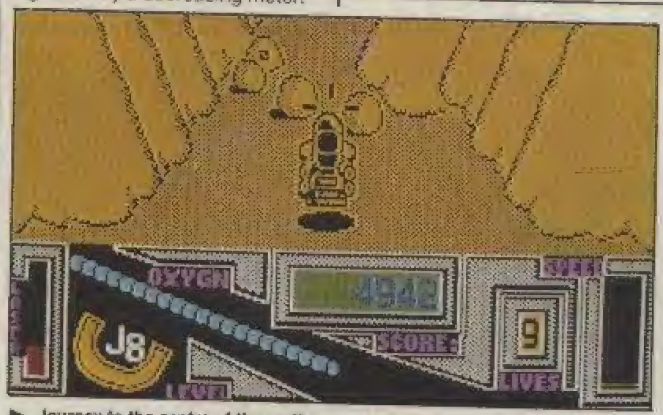
Once again the Universe is under threat: the evil ruler Teladon is plotting destruction from his hideout deep in the labyrinthine structures of the moon which bears his name. The player's task, armed only with a hoverbike and a laser gun, is to navigate the complex tunnels and mazes, locate the self-destruct button and initiate Teladon's demise.

The moon is surrounded by a series of concentric mazes connected by rocky tunnels. Avoiding the edges of a steep-sided 3-D crevasse the player searches for an exit into the complex below. Enemy vessels attack and occasionally create laser beam fences which must be destroyed; a moveable target allows direction of the hoverbike's laserfire.

Collision with any obstacle at average speeds means instant death, but travelling at very slow speeds causes the bike to bounce rather than explode. Excessively slow progress is detrimental to the player's oxygen level, though, as signalled by a decreasing meter.



► **Two different game environments**



► **Journey to the centre of the earth**

Once located, a hole in the ground allows access to a maze of 3-D passages inhabited by hostiles which are best avoided. The task is aided by collectable icons which represent extra lives, laser supplies, oxygen bubbles or keys for use in the tunnel below.

As the player nears Teladon itself the surrounding tunnels and mazes become shorter. Having reached the centre, the self-destruct is activated and the Universe liberated from doom.

CRITICISM

● *"Teladon* involves an interesting combination of elements. However, for a game which boasts two completely different areas of play, it doesn't offer much variety. Hurtling down the tunnels requires so much care that the race soon turns into a ramble; attempts to inject some speed into the procedure are swiftly halted. The maze sequence lacks compulsion since you have very little power to combat alien fire and there's little to collect. Zapping enemies gives minor satisfaction since they have the annoying power of regenerating whenever you return to a location. Gameplay is initially quite difficult and, unless you persevere, you definitely won't get hooked. 20 levels in the same monotonous mould are unlikely to lead to major addiction."
KATI

● **"After playing and greatly enjoying** Yeti, **I held high hopes for** Teladon. **But alas, it was not to be. What I did find was a graphically average, collect 'n' blast maze game with one or two interesting ideas. Although fun at first, I soon tired of first zooming along a canyon at full pelt on a jet bike, and then descending to the subterranean mazes to battle it out with the guards (who simply potter up to you on their little scooters and blast you to bits).** Teladon **is a merely average game, and although not disastrous, I leave you with the time-honoured piece of advice: 'try before you buy'."**
MARK

● *"In trying to combine two memory-exhaustive game types,* Teladon's *programmers have had to compromise. The blend is a repetitive and ultimately tedious mongrel of a game. Not only is* Teladon *boring, both parts are very tough to play. The perspective scrolling in the tunnel section is too jerky and the laser sight too slow to permit accurate blasting of hostiles. The game also comes to an abrupt end if you don't decelerate in time to shoot a force field, because the player is reincarnated on the same spot on which he expired, and is forced to sit repeatedly through the static effect until all lives are gone. The maze section is made extremely difficult by the laser-toting aliens, and luck is at a higher premium than skill. The final nail in the coffin is the lack of variation in both sections; even the pretty graphics can't save* Teladon *from mediocrity and I advise against buying it."*
PAUL

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: lacking in variation and colour
Sound: a poor repetition of uninspiring sound effects
General rating: a mediocre game whose potential has not been fully realised

Presentation	67%
Graphics	65%
Playability	46%
Addictive qualities	45%
OVERALL	**49%**

RASTAN

Producer: **Imagine**
Retail price: **£7.95 cassette, £14.95 disk**
Authors: **Icon Design from a Taito coin-op**

Coin-op hero Rastan, king of Maranna, is the only man tough enough to liberate his kingdom from the evil influence of the wizard Karg. In an attempt to gain control of the barbarian race the nefarious necromancer has released a host of beasts and demons upon the land.

Protected only by leather and bearing his trusty sword, Rastan hacks his way across a horizontally scrolling landscape of underground passages, grim citadels and rocky cliffs. Unexplored parts of this hostile terrain are connected by flights of steep steps and ropes swinging perilously over lakes of fire. Remote areas boast deadly streams and lava flows; contact with either of these results in instant death.

The wizard has enlisted a grisly crowd of allies, ranging from docile looking lions to ghoulishly aggressive demons. Their instincts are to attack on sight, and the more humanoid beings have seemingly unlimited shot power.

Rastan can find and collect a number of helpful items including more powerful weapons, bonus shields, mantles and also medicines which reduce vulnerability. Some enemies carry jewellery which bear a variety of mysterious powers, and more devious opponents attempt to fool the warrior king by carrying poison in the form of a magic potion.

Each level hides a particularly powerful adversary which must be defeated before passing on to the next. A beating heart and attached energy gauge record health status and should all of Rastan's five incarnations be lost, the player is given the option of starting again on the last level visited. This option is offered three times after which Rastan's quest is started again from the beginning.

The barbarian king's mission reaches its climax in a final confrontation with Karg himself. The wizard takes on the most powerful form he knows: the body of a soul-sucking dragon. Only the most legendary of heroes has the power to pierce his hide.

► *Rastan*: climbing the rope to success

KATI

" Hacking and hewing through hellfire demons, Rastan the dragon-slayer, barbarian warrior supreme, slashes his way through some surprisingly subtle designer graphics. Pastel shades and different gradations of grey, pierced by sudden splurges of red, turn Maranna into a bleak and hostile world. Rastan himself is smoothly animated and all the different ducking, fighting and jumping actions are clearly defined. A game which concentrates on killing marauding fiends is obviously limited in terms of depth but the swinging ropes and the bonus collection system ensure ample variety. Difficulty is well graded (the first level even has a practice rope) and your first go takes you just far enough to keep you hooked. As you're given the chance to start again where the last game ended there's no laborious repetition of levels you already know off by heart. Rastan is slick and compelling – anyone remotely interested in the barbarian cause and those new to the sport have nothing at all to lose. "

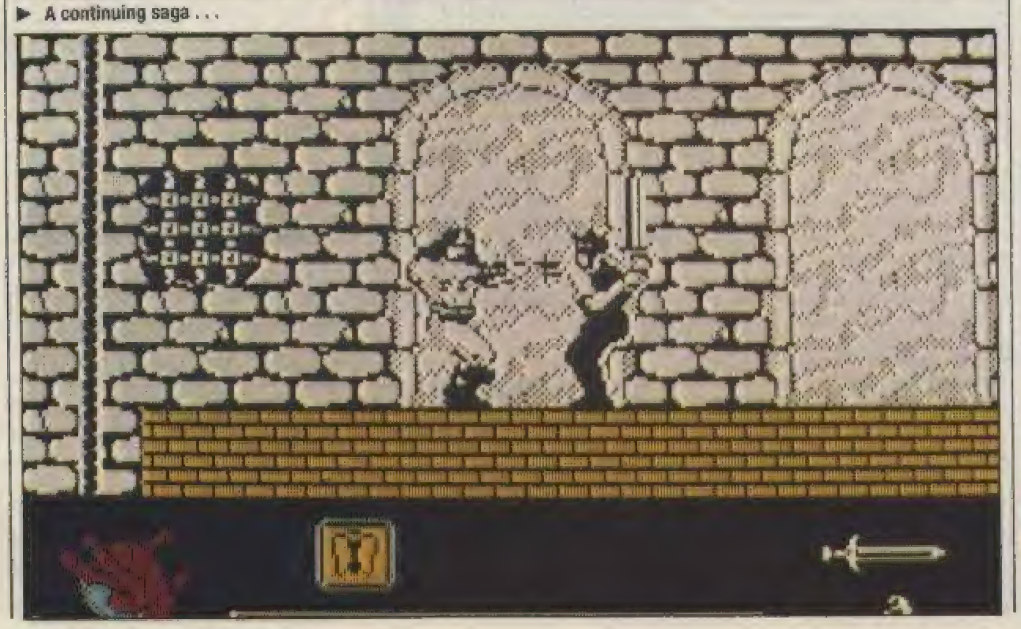
NICK

" Rastan is another coin-op that doesn't seem to have the same addictiveness on the Spectrum than it does on the original machine. The graphics are detailed enough and look good on the screen, but the unrealistic way Rastan moves around the world of Maranna and the lack of colour is very offputting. There's a feeble tune at the beginning and weak spot effects throughout the game. Rastan **contains some of the best enemy sprites I've seen for ages, but although they look really vicious, when you run into them you just go straight through as if nothing had happened! In some places you could mistake it for a large version of one of Software Projects' classic** Jet Set Willy **games because there are swinging ropes that are almost impossible to hold on to. Another drawback is the terrible multiload that destroys any excitement that the game may have had.** Rastan **is disappointing. "**

MARK

" I'm all for hack 'n' slay type games, and Rastan **is just the ticket. Graphically good, a macho Conan style main character cleaves his way across a variety of solid, smooth scrolling backdrops. Adversaries are also well animated, and include skeletons, lions, bats, and snakes – all as mean as hell and eager to contribute to the barbarian's demise. One small thing that did annoy me was the intrusive and time-consuming multiload. In the end I found this most tiresome, but it fortunately didn't spoil my enjoyment of the game.** Rastan **is a great game for all you closet mad axe-wielders out there. "**

► **A continuing saga . . .**



COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: superb use of BRIGHTs with detailed drawings of all the large characters
Sound: feeble title tune with bash and crunch effects
General rating: a playable arcade tie-in, although lacking in variation and content – the multi-load is also annoying

Presentation	80%
Graphics	85%
Playability	83%
Addictive qualities	79%
OVERALL	**85%**

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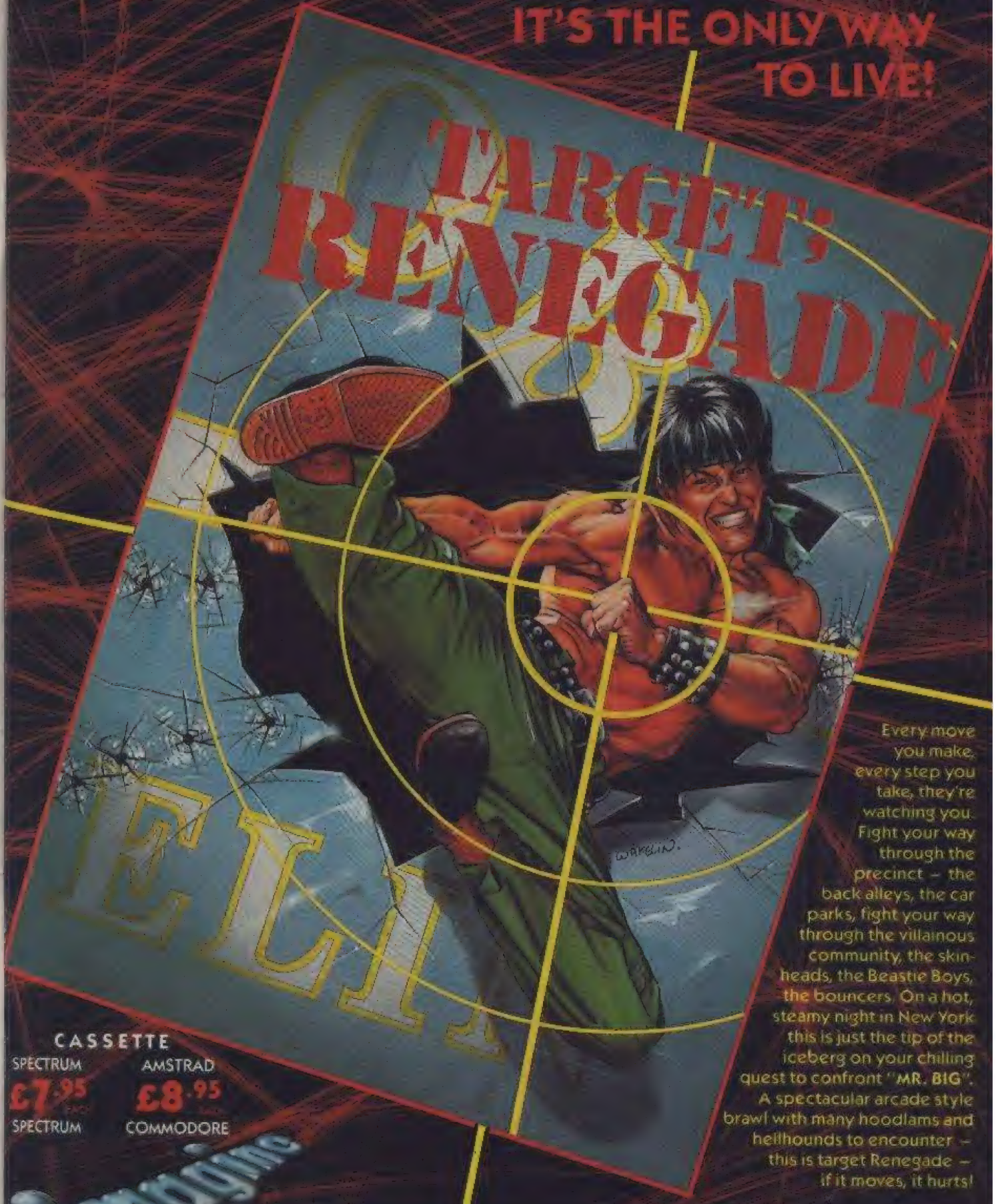

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ZOLYX

Producer: **Firebird**
Retail price: **£1.99**
Author: **Peter Cooke**

The objective of *Zolyx* is to fill in an empty screen by enclosing areas with straight lines, which then automatically fill with colour. Lines are drawn by a cursor which is directed around the screen, and constantly moving balls are avoided since contact with the cursor, or any part of an incomplete line, signals the loss of a life.

Continuous line length is limited by a glowing ball which chases the cursor after a set time. Again, a life is lost should the ball and cursor touch.

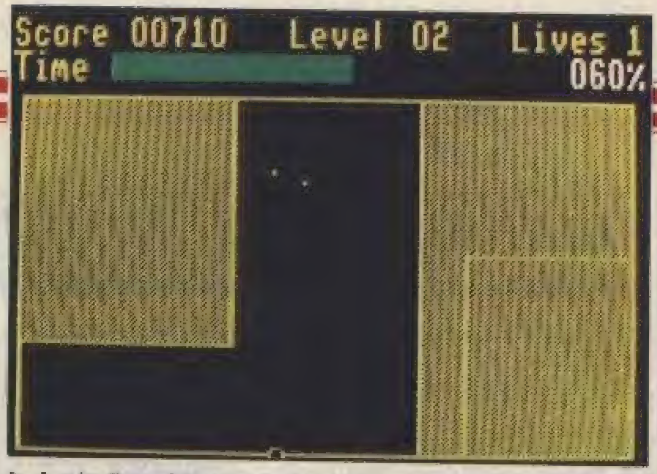
At least 75% of the area must be filled in within the time limit to allow progress to the next level. For every percentage above 75 bonus points are awarded. Each level successfully completed sees an extra ball is added to the screen.

CRITICISM

● " When *Zolyx* was first released on the Commodore it was met by almost universal acclaim. Surprisingly, this conversion is an unmitigated disaster. No satisfaction is to be gained from transforming the screen; the blocks have different textures, are divided by thick black lines and combine to form an ugly patchwork of motley patterns and hues. The killer ball, introduced specifically for the Spectrum, makes long sweeping strokes across the screen impossible, and effectively cripples play. Definitely not recommended. "
KATI

● **" This game is just so unattractive and unaddictive that is isn't even worth £1.99! The graphics . . . well, are a couple of blobs and dots worth mentioning? Colour is restricted to just one per screen, occasionally being garish and limited to unsatisfactory dot shading. The idea is too simple; attempting to fill in 75% of a screen with shading isn't my idea of fun. Perhaps if there were a few more enemies it might have perked up a bit, but otherwise it just looks like a failed first attempt at programming on a ZX81! "**
NICK

● " *Zolyx is very similar to an Atari game I owned about five years ago called Qix. The idea is simple enough, so what do Firebird think they are doing? They have taken a simple, but pleasantly frustrating game idea, and turned it into this totally unplayable pile of you know what. Graphically Zolyx is totally dire, although gameplay – if possible – is even worse. Firebird have messed the game up something rotten. Whatever you do, DON'T buy this.* "
MARK



► **A major disappointment on the Spectrum**

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: serve their purpose
Sound: simpler than simple
Options: definable keys
General rating: *Zolyx* started off as a simple and effective game on the Commodore 64, the programmer has tried to make it what it isn't – complex

Presentation	30%
Graphics	18%
Playability	13%
Addictive qualities	10%
OVERALL	**14%**

THING!

Producer: **Players**
Retail price: **£1.99**
Author: **Colin Swinbourne**

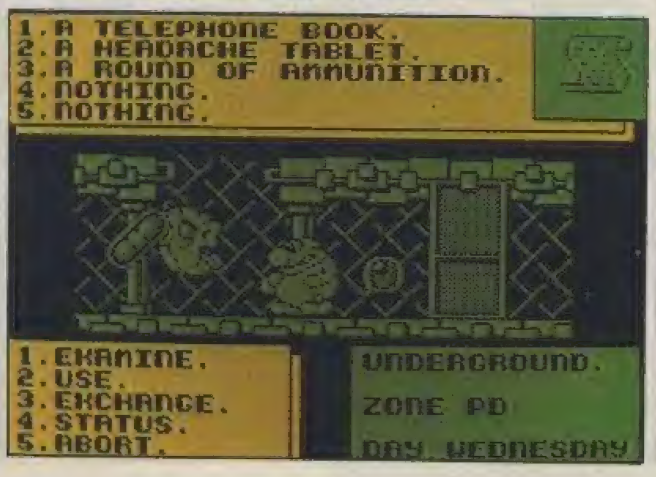
The planet of the Dingalingers is under threat of nuclear war. The Ball, representative of the Astral Harmony Council, and his intergalactic postperson courier, Thing, have been sent to liaise with the Dingalinger Overlord.

On arrival, the Overlord refuses to meet with the Ball until the Thing has completed ten tasks. Equipped with nothing but a telephone book, and accompanied only by his ally the Ball, the Thing is let loose over the planets' 26 levels, all of which are interconnected by a network of teleport booths.

A series of floating capsules contain objects which the Thing must collect and use in the correct combinations. The Dingalingers try to obstruct his work, but the Ball is equipped with a phased-plasma servocannon which has the power to stun.

If all the puzzles are solved in five days, the Overlord dispels his mood and rewards the Ball with an audience. Should Friday pass with the tasks still incomplete, Thing, Ball, Dingalingers and all, are doomed.

► **Half way through the week and still things to do**



PAUL

" Although arcade adventures are common on the Spectrum, Thing!'s tidy presentation and humorous graphics help it stand out from the crowd. Gameplay is moderately slow, sometimes with periods during which there is nothing to do but plod forwards. The shooting action is also a nuisance, in that Thing frequently runs into the hostile Dingalingers, resulting in some short-lived games! The strong brain-teasing element was enough to keep me playing, though, and if puzzles are your poison, I would suggest you exchange a couple of coins for Thing!. "

MARK

" Thing! is quite nice, graphically, with a couple of rather cute-looking characters fighting off the treacherous Dingalingers, and attempting to complete the tasks set by the Dingalinger Overlord. These puzzles are quite simple, but are challenging all the same, and will probably take several games to solve. Once completed however I feel the game will lose its appeal, but until then, just keep going! "

KATI

" The ridiculous storyline of Thing! warns you not to take this game too seriously, and the cartoon style graphics create an atmosphere of absurdity. Most of the problems are just an excuse to make some very silly jokes (it's easy to work out what to do with an American Express card, but what do you do with a CRASH reviewer . . . ?). Whether you like this sort of thing depends entirely on the depths to which your sense of humour is prepared to sink. £1.99 doesn't seem such a bad deal to me. "

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: the cartoon characters are extremely attractive and cute
Sound: jolly title tune with spot effects
General rating: a very playable and comical budget game

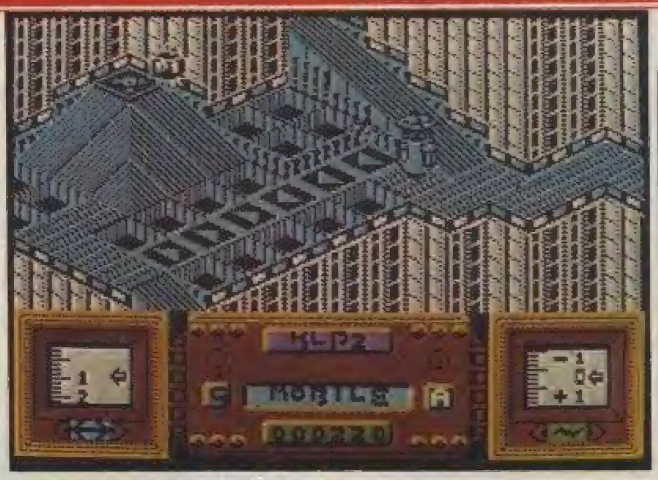
Presentation	74%
Graphics	79%
Playability	70%
Addictive qualities	80%
OVERALL	**73%**

MAGNETRON

Producer: **Firebird**
Retail price: **£7.95**
Author: **Steve Turner**

KLP-2 is the little droid who made his first appearance in the citadel of *Quazatron* (Issue 28, 94%). His motorised skills are now in demand again: this time demon droids are in orbit above the planet Quartech which is being threatened by the eight armed satellites under their control.

KLP-2 is immediately beamed aboard the first satellite, where his task is to negotiate the multicoloured 3-D landscape of ramps and walkways which comprise each station, locate its four reactors and deactivate them. The stability of a reactor is entirely dependent on the combined charge of its positive fuel rods and



► 'Disappointing *Quazatron* follow-up'

NICK

" Magnetron has the same old graphics, the same old ideas and the same old gameplay as that other Graftgold game, Quazatron. You can get a bit of fun out of it to begin with by zooming up and down the ramps and doing death leaps from the top of high ridges, but once this novelty has worn off you are left with a monotonous 3-D game. There are some reasonable effects in the game, like the pattern of Magnetron sprites making an oval shape in a starry sky at the start, but not much else. Grappling with robots is extremely confusing at first, and only having a few seconds to complete it makes the matter worse. Magnetron has little new on offer and doesn't really deserve closer examination. "

MARK

" Long ago, there was a Commodore game called Paradroid. This game was so successful that it was followed by Quazatron on the Spectrum, and its hero, KLP-2, now returns to star in Magnetron. I know what you're probably saying, 'Surely by now this game type is dead and buried?' But no; the same formula has been used to produce yet another episode in this Paradroidesque saga. However, I must say that I actually like the game: I found disabling the enemy droids and tracking down and destroying the power plants quite enjoyable. Admittedly anyone totally bored with this type of game won't find anything new in this latest offering, but if you have been off-planet, or stuck down a dark hole for the last few years, take a look. "

KATI

" Magnetron should have been called Quazatron II since it's merely an updated version of the prototype rather than an original game in its own right. The few elements which are significantly different actually spoil the playability of the game. Admittedly the monochrome Quazatron landscape has been given an injection of much-needed colour, but impressive graphics can't salvage insipid gameplay. In Quazatron the grappling sequence was exciting and unpredictable; Magnetron's icon puzzle lacks a competitive edge and becomes increasingly repetitive. Neither the reactor problem nor the grappling sequence are complex enough to sustain anyone's interest for very long. Trudging monotonously from one to the other is a process which is best avoided. "

SHACKLED

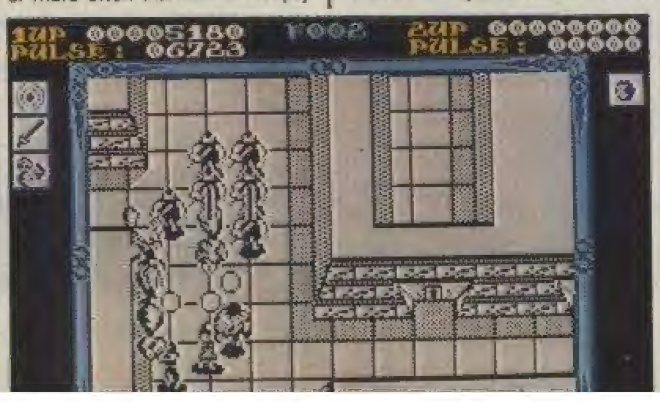
Producer: **US Gold**
Retail price: **£8.99 cassette, £12.99 disk**
Authors: **Choice from a Data East coin-op**

Kein is not a happy man. Seven of his best friends have been captured, and are being held in a maximum security prison. His mission: to rescue and lead them back to safety.

The game begins with the armour-clad Kein standing on the first level of the prison. As he travels through the maze of corridors he comes across barred prison doors, opened simply by blasting them. Behind these are either one of his friends, a guard, or more often than not an empty cell.

On discovering one of his friends, Kein takes charge of the weapon they are carrying. These include grenades, shuriken stars, disks, shock waves, boomerangs, cushion balls, and fire balls. Each character holds a different weapon, and once gained are displayed as icons which can be scrolled through and used as desired.

Sword, axe, and spear-wielding guards make their presence felt, and Kein loses energy points whenever they attack him. Bonus



MARK

" There have been plenty of Gauntlet variants over the last few years, but unfortunately most of them have been pretty poor affairs. Shackled on the other hand, although not graphically brilliant, is at least playable. The dungeons are nicely drawn and although the scrolling is jerky and character movement slightly wooden, this didn't spoil my enjoyment too much. In fact, I found the game quite entertaining. It's not exactly the new Gauntlet – but it's better than most of the other imitators. "

KATI

" Gauntlet has spawned so many clones it's hard to muster any enthusiasm at the prospect of another one, but at least Shackled has added the comparative sophistication of 3-D. Dashing around the mazes in a desperate attempt to find your friends and keep them safe (disorientated prisoners have a tendency to wander off) has a realistically frantic touch. The battles sequences themselves are reminiscent of a comic strip as weapons and bodies disappear in a cloud of dust. The scrolling is slightly jerky, and you don't get more sound for your money than one or two (admittedly atmospheric) spot effects. With a little more attention to detail this merely good game could have become an excellent one. "

NICK

" Coming from US Gold this game is a bit disappointing. The tiny graphics and frustrating movements don't exactly make the game addictive. It's very similar to the rest of the Gauntlet clones that litter software shelves around the country, all of them exactly the same in graphics and ideas. Shackled does however have some fresh things in it: the way you rescue people from their bonds and then inherit whatever weapon they had is a new idea, but the two player mode is terribly frustrating when player two gets left behind and player one has to stop while he catches up. Shackled is well presented and has adequate sound effects but there are simply too many similar games on the market. "

its negative inhibitors. By swapping fuel rods KLP-2 can manipulate the charges sufficiently to cause the reactors to shut down or overload.

The droid inhabitants of the stations are completely unsympathetic to his mission and although KLP-2 doesn't have enough firepower to counter them directly, he can 'grapple' with other droids in an attempt to take control of their attributes. Three different sets of icons are aligned on a grid within a given time limit. A successful grapple discards the old shell, which then acts as a back-up life.

Once all four reactors are deactivated, the station shuts down allowing KLP-2 to beam boldly on to the next.

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: an improvement on *Quazatron* – more colour combined with intricately detailed objects
Sound: only a few unimpressive spot effects
General rating: playable, but certainly not as good as *Quazatron*

Presentation	72%
Graphics	67%
Playability	56%
Addictive qualities	49%
OVERALL	**57%**

items are available throughout the dungeons including coins to boost Kein's energy level, keys to open doors, rings that increase shot speed, necklaces which speed up the player's movements, and diamonds that kill all adversaries on-screen. Also to be found are treasure chests, barrels, lamps, and crowns, which bestow a hefty points bonus.

Once all of the cells have been searched on a level, Kein must collect the correct key, and lead his freed companions to the exit. The next level is then entered and Kein continues his quest until either his energy runs out, or he has liberated all of his companions.

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: miniscule characters on a plain and simple background
Sound: very few atmospheric spot effects
Options: one or two players
General rating: a convincing arcade licence, but lacking originality and content

Presentation	68%
Graphics	65%
Playability	73%
Addictive qualities	69%
OVERALL	**%72**

FRIGHTMARE

Producer: **Cascade Games**
Retail price: **£9.95**
Author: **Ron Ashley**

Each person's subconscious stores primaeval memories which seep into our dreams. *Frightmare* dares the player to step into this psychic abyss and surrender to fears in the landscape of their darkest imaginings.

The nightmare takes place over a period of eight and a half hours in the supernatural environment of four dream zones, travelling through a surreal world of ruined, crumbling statues, networks of skeleton trees and rooms of blood-red skulls. In true dream fashion, the ability to jump is weirdly enhanced – death by falling is a strange impossibility.

This dreamscape is haunted by the victims of five ancestral tales and legends. Contact with any one of them means the loss of one of the dreamer's five lives. Ranging from zombies to scarlet disembodied hands, these can be countered by a series of collectable weapons. Holy Water kills all monsters instantly; revolvers (for which you also need to collect bullets), crucifixes and random potions have a more selective effect. Other icons increase your ability to jump, represent extra lives and allow you to warp to different rooms.

As the inner self is penetrated, the dream state, recorded in letters at the top of the screen, alters accordingly. Beginning with a 'bad dream' the state slowly advances to finally become a 'nefarious frightmare'. After that all you have to do is wake up.

Each new room visited moves the clock on by six minutes; at 8.12 am the frightmare is over and the harrowed dreamer awakes.

► *Frightmare*: **look before you leap**

NICK

" I didn't know that my darkest dreams were full of badly drawn characters, colour clash and irritating gameplay, but that's what the Frightmare **adverts say, so it must be true! The best thing about** Frightmare **is the inlay, full of ghostly descriptions of the inhabitants of the frightmare itself. The game itself is the pits. The animated ghosties flicker all the time and none of them look remotely scary. Many of the screens are similar and range from bare to bland. The best graphics in the game are on the title screen with the word 'Frightmare' scrawled across the top. If you are looking for a ghosty game then this isn't the one for you. The now aging** Ghosts 'n' Goblins **is far ahead of this. "**

KATI

" Like a recurring dream, the promotion of Frightmare **has been haunting the magazines with monotonous regularity for months. Unfortunately, the realisation is never as good as the dream. Nevertheless,** Frightmare **is entertaining enough. The macabre graphics create a fittingly ghoulish atmosphere and even the control method – somewhere between jumping and floating – is expressive of the surreal ambience. The real nightmare, however, is the price. As a platform arcade adventure it's hardly a pioneering breed. Unremarkable spot effects, messy collision detection and slightly clumsy controls mean that it doesn't even rank as one of the best of its type.** Frightmare **can get very addictive, but £9.95 is a high price to pay for some fairly standard fare. "**

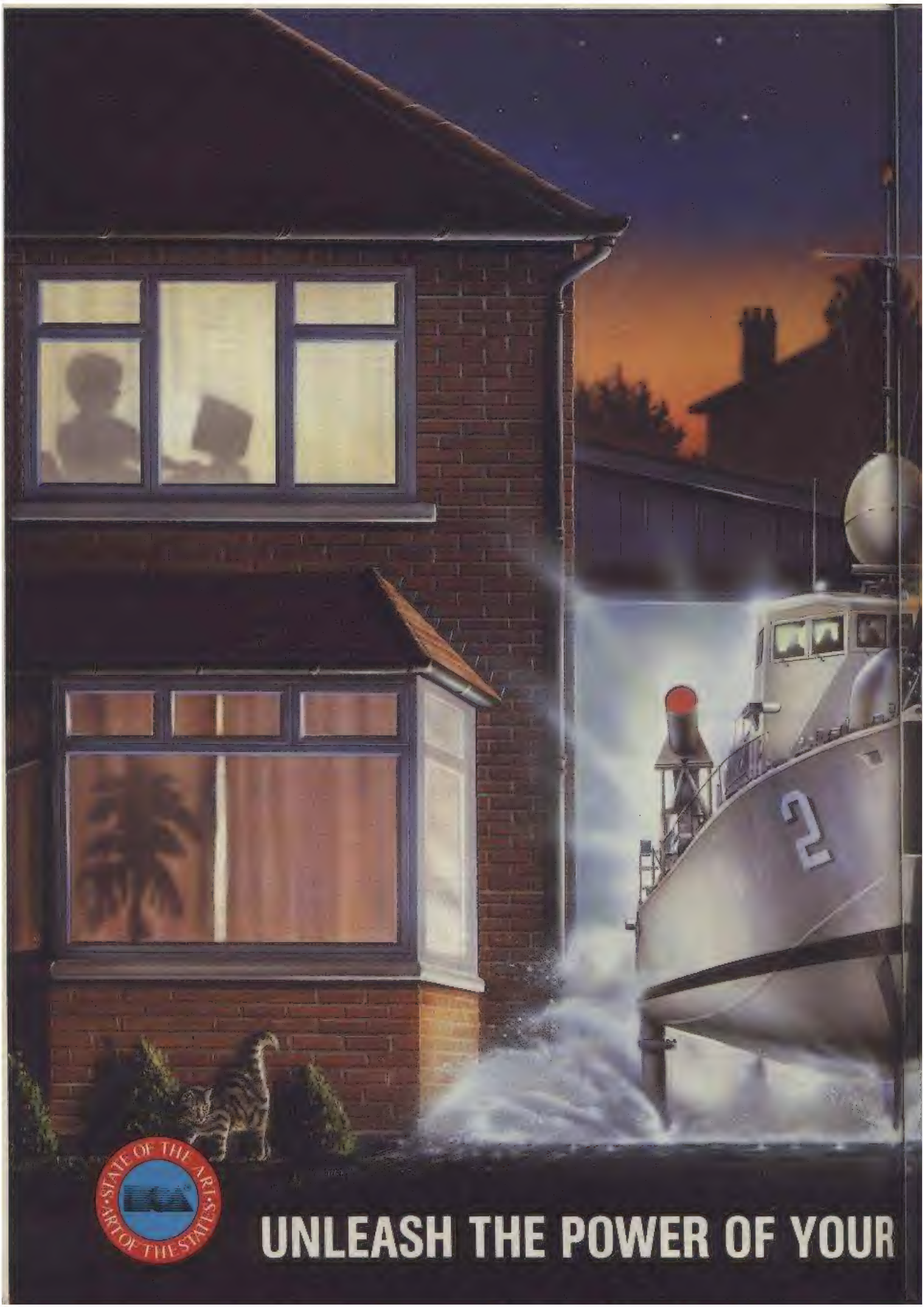
MARK

" Thank goodness my worst nightmares aren't half as creepy as the guys in this game! Graphically, Frightmare **is pretty good. Of particular note is the loading screen picture, based on the cassette inlay. The in-game graphics are also quite good, with some rather nasty looking adversaries to be either killed or avoided. Although the game is initially playable, with a very athletic hero bouncing around the screen, I soon discovered that it was little more than a' run around collecting enough objects to continue through to the next, even more bizarre part of the nightmare' type of game. Although quite chilling at first, sadly I found that tedium soon sets in. "**

COMMENTS

Joysticks: Sinclair
Graphics: badly drawn and crudely animated
Sound: poor spot effects
General rating: of strange curiosity value for those with a spare ten pounds

Presentation	73%
Graphics	47%
Playability	57%
Addictive qualities	57%
OVERALL	**57%**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LLOYD MANGRAM'S FORUM

Trying to please all of the people all of the time is the main theme of most of this month's letters; quite honestly, if we could get that trick right we would be the very best magazine ever printed. As it is, CRASH like any other publication is a collection of individuals working hard to get most of it right most of the time – and even succeeding now and again! However, for letter of the month, and that all-important £30 worth of software, I have chosen a writer who has noticed, as many others have, that the seductiveness of the 16-bit may only be skin deep . . .

LIFE, THE UNIVERSE AND 16-BITS

Dear Lloyd
Well, the fiftieth edition of CRASH has been and gone, and I thought it was about time I put pen to paper and whinged about the state of CRASH, the software industry, life, etc.

The former to begin with. I must admit, despite being an avid CRASH fan for many years, that since the considerable price rise, the magazine has if anything, got thinner. Gone are the days of 130-140 page issues which kept me reading for many an hour. But, as my English teacher reminds me, quality is more important than quantity, and CRASH still beats the socks off its rivals, particularly since *Sinclair User* has invented the unbelievably childish Kamikaze Bear. Still, each to their own, and if *Sinclair User* (whoops!) thinks a market exists for Spectrum owners whose idea of intellectual reading is 'The Sun', then no doubt their new style will do well. Enough of the 'Well done CRASH, can I have my £30 of software now please' – and onto more wide-ranging matters.

Upgrades. Let's be honest here, who among my fellow Spectrum owners, hasn't once looked at an Atari ST/Amiga screen shot and said 'Damn those attribute problems!' or something similar and perhaps a little more colourful. I am lucky (?) enough to have a 16-bit owning friend who takes great pride in showing me the latest software ('I don't believe US Gold did such a good job on the Spectrum version . . . ' or 'So the Spectrum version of *Starglider* wasn't this fast then?') and making snide remarks at the Spectrum's expense. Of course, now many Spectrum owners are selling up and saving for the latest in gaming technology. But having seen all these games on the 16-bit machines, every single one seems to lack that extra level of addiction that the Spectrum versions had. My friend plays each new game for a week, and then it collects dust in his disk box, while I play games such as *Match Day II* for months and still come back to them a year hence and play them again (for example I have just dug up *Minder* by DK'Tronics and begun playing that again). And that's after paying a fraction of the price for new software. Such sentimentality, however, cannot halt the flood of upgrading Spectrum users enticed by superb graphics and attractive sound (or should it be the other way round? Never mind . . .). I would still advise anyone thinking of making the giant leap to keep their Speccy: they won't get much for it after all, and at least it means you'll still be able to play *Match Day II* if Ocean don't do a 16-bit conversion.

Partly on the subject of the Atari ST, I see that Silica Shop are still advertising it at the 'new' price of £299. The very same advert has been with us since pre-1987 PCW Show – hardly very new. Still, time – as one great time traveller once said – is relative, and I suppose Silica thought that it is still new compared with the Acropolis or Stonehenge.

Talking of advertising gimmicks and blurb brings me nicely on to the subject of slogans (that sentence courtesy of the 'BBC Book Of Contrived Links Vol IV'). It appears to me that most of the major software houses now have new slogans. It all began many years ago with companies like Cheetah ('Soft we're not') coming up with an oily line to complement an even sillier logo. Well it seems that slogans are now 'in'. Imagine have always been 'The name of the game', but since when have Firebird been 'A Legend in Games Software' (to be read in a deep, macho voice). Gremlin are 'Worlds apart from other software' and Go!! take the award for the corniest in the shape of 'Tomorrow's software today'. (A million speccy owners now murmur, 'Well if that's tomorrow's software then I hope tomorrow never comes).

I couldn't sign off after this mature ramble around the Computer World without mentioning THE GAMES MACHINE. In my opinion it's very good, with in-depth reviews and interesting features. Its only annoying factor is the repetition of screen shots between it and CRASH. If I've just bought CRASH I want to see different pictures of different parts of the game – not the same ones I saw in CRASH. Nuff said?

All good things, as they say, must come to an end. Although that excludes my waffllings I think it's about time I came to the point of this letter. Unfortunately there isn't one so I'll stop now. If its not too late a well deserved Happy New Year can go to the CRASH team, who – despite odd exceptions – all keep the mag to a very high standard. Vorsprung Durch Technik as they say in all the best car commercials . . .
Nigel Palmer, Norwich

During my occasional forays into THE GAMES MACHINE office, I get to see and play more 16-bit games than you can shake a stick at. And to a large extent I agree with your views: the majority of the releases thus far are very pretty to look at, and positively terpsichorean to listen to – but they play like a brick. There are the odd one or two at which this criticism cannot be levelled, but if you rate playability higher than the merely aesthetic, then the evergreen Spectrum still has plenty to offer in the games department.

As regards upgrading to a 16-bit machine, (bearing in mind that the Amiga costs £450, the ST is due for a £100 price increase and the software currently hovers around the £20 mark), selling your Spectrum and software collection would appear to be a false economy.

CRASH a bit thinner? Well, yes and no (how's that for an equivocal answer?). But sometimes you're up against unarguable financial facts, and the men with the books at our Gravel Hill office say that compared to two years ago CRASH is not quite as profitable as it was – probably because there's more colour in it now. Some issues are thicker than others – it depends a bit on the time of year, and after Christmas each year there have been thinner issues. Prior to Christmas there were several fatter CRASHes too you know.

LM

PLAY IT AGAIN, LOKI?

Dear Lloyd
In the dim, dark past before I started reading CRASH, I read *Sinclair User* for many months. In their June 1986 issue there was an article about a new Superspectrum, the ZX Spectrum Loki. This machine was to be similar in specification to the Amiga but at a fraction of the cost. In the August 1986 of CRASH you denied that such a machine existed, but after reading the article in Issue 50 about MGT's superclone I'm not so sure.

The specification of the Loki said that the microprocessor would run twice as fast as the current Spectrum's CPU and that it would have many connections such as MIDI IN and OUT, built-in joystick ports, RGB monitors, video composite monitors plus VHF TV sockets. In addition, the Loki would boast a significant improvement in graphics display (256 pixels per line and 64 colours). If you then check these features against the SAM specification, you find that all these features are available on SAM. In fact, SAM would advance on the Loki's graphic handling by allowing 512 pixels across the screen, and the normal 192 lines if required. It was mentioned that with the Loki a light pen came as standard, and of course SAM has this facility, so it seems to me that MGT have taken their ideas from the fabled Loki machine.

As a rubber-keyed Spectrum

owner, I hope that SAM does make it onto the market because I personally feel that it is a better upgrade for 48K Spectrum owners rather than Amstrad's inferior Spectrums +2/3, which on closer examination are only Amstrad CPCs with the Sinclair name stuck onto them.

Clive Sinclair's humble machine is a technological miracle, but as Amstrad's only care is to make money and not consider existing users I say to MGT, 'Good luck and bring back Sir Clive's pioneering spirit which in Amstrad's hands seems to have gone down the drain'.

Ian Lacy, Ilkeston, Derby

After a lengthy telephone discussion, Simon N Goodwin assures me that there is little ground for any comparison between the two machines. Unlike SAM, the Loki has never and will never exist outside of a few sheets of typed paper, simply outlining the features Sinclair deemed to be necessary in a next generation machine-cum-Spectrum clone. Also, a few of the features you mentioned aren't really applicable: the Loki was to include sampled sound and hundreds of colours; SAM is essentially a ZX Spectrum but with slightly improved sound and limited attribute problems.

LM

TIPS DEFICIT

Dear Lloyd

There are a number of issues I'm a bit cut up about here. For a start I am infuriated about the attitude of Henry Shades towards the Spectrum (Issue 49). That sort of attitude is killing humble Spectrum owners who don't have £299 kicking about to buy an expensive computer. I have an original 48K bought first-hand for £45 in February last year. Does Mr Shades think that *Driller*, *Exolon*, and *Head Over Heels* are not improvements on games such as *Scuba Dive* and *Atic Atac*. To pick *GFL Championship Football* is not a very good example of assessing Spectrum games. Spectrum games are competing avidly with the Commodore, Amstrad and Atari games, and they are rising in standard rapidly. I may be an old 'fuddy-duddy' but I don't think that Spectrums are ancient. When you can purchase Speccies for £50 why not save yourself £250 and get one? You won't regret it.

My final complaint is about the Playing Tips section. In Issue 49, of the nine pages there were only three POKEs and five tips. Two pages were wasted with an advert for the 'new' +3 (put it somewhere else) and an amazing five pages of maps were used. These maps do not have to be so big do they? Just make them neat and smaller – not mega. I do not rate maps to be as important as tips and POKEs. So Nick, more tips and POKEs please, and if you can't be bothered to test them bring back LM to playing tips.

I still like CRASH though. Reviews are excellent, having more than one opinion. The competitions are okay (we want more) and Oli Frey's artwork is excellent. Forum is good for letting off steam, and special indexes and features like Run It Again are very interesting. Keep up the quality that has enabled you to reach issue 50 and still be the best Spectrum mag around.

Christopher Harby, Sleaford, Lincs

Thank you for the final compliments Chris, but I feel (as an old hand so to speak) I must defend Nick and say he does a fine job of the Playing Tips. I feel most people would agree that maps are an important facet of the tips section, giving aid in playing while not 'cheating' as with POKEs or hints. However, it's also true that all maps and no words make for a dull section, and some months maybe we're guilty of filling space with maps that are printed bigger than they need be. But a deficit of POKEs and tips can hardly be Nick's fault, for he merely checks and collates the information sent into him; he can't print POKEs he hasn't got! Get the message? The tips section is only as good as the stuff sent in, so get working!

LM

REVIEWS RUN OUT

Dear Lloyd

I am writing to complain about the accuracy, or rather the lack of it, in many of the reviews in Issue 49.

Firstly, the review of *Out Run*. The resounding opinion amongst my friends is that this has been vastly underrated. I agree that the multiload 48K, is to say the least, a pain the backside. The graphics are extremely well detailed, and the animation is great, especially the movement of the car as it negotiates hills and turns. I have to point out that only Nick was accurate in his review. Mike has a tendency to either overrate or underrate games (the latter with

Out Run). *Out Run* should have been given in the high eighties, if not a Smash.

This leads me onto *Rampage*, which, in my opinion is sheer violence, sheer brilliance. Again, only Nick was anywhere near accurate in his review in my opinion. Perhaps the game could have done with a bit more action, but this problem has been solved with the inclusion of a three-player mode, which adds spice to the proceedings.

Gary Lineker's Superstar Soccer . . . AAARGH! This game, to put it politely, is PURE CRAP (there's an oxymoron for you!) How on Earth did that game pass? When your opponent is about to kick off, you can run up and snatch the ball from him, and consequently score.

Scruples is another game which the locals think has been underrated. When played amongst friends, the game is great. It merits approximately 80%.

Not having *IK+*, I perhaps should not comment on this, but do the graphics really merit 90%?

Having *Gauntlet II* and *Gauntlet*, I agree that they are very similar. Has the overall appeal dropped 27% in a year? I doubt it very much.

Usually, the reviews are accurate, but I felt I had to comment on the aforementioned games. Incidentally, what happened to *World Class Leaderboard* and *The Double*. Why were they not reviewed?

Here are a couple of general comments about the mag: When reading the Scores page, I experienced déja vu. Was it an error or was it deliberate?

When printing competition winners, how about printing the answers?

Subscription – why do present subscribers have to pay more if they want to renew their subscription and get *Platoon*?

Finally, congratulations Newsfield, for the excellent GAMES MACHINE. Issue 3 was my first purchase of TGM, and it won't be the last. Congrats, again!

Scott McGlashan, Glasgow

The perennial argument! And, as ever, the answer to your disagreement of reviewers' ratings is down to personal taste: the ratings and comments given to each game are based solely upon the feelings of the reviewers in question. You can't expect to agree with all of the ratings all of the time – we only try to give as comprehensive and unbiased a review as possible to help guide your decision to purchase the game. For instance, I did not think very highly of Out Run, *although it wasn't exactly bad, it also wasn't as well implemented as it should have been; still, it can be very playable. As for* Rampage, *I thought it was tedious and a waste of time – and I don't even get to write reviews any more!*

Since the reviews mentioned, Mike Dunn has left the reviewing team to pursue his academic quests and is replaced as of this issue with two very knowledgeable new reviewers. However, Nick (with whom you appear to agree with most of the time) is staying. The subscription was something of an error, although one that many readers spotted, happily assuming to their benefit that it didn't really make sense the way it was. Sorry about that.

LM

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ADVENTURE DEFICIT

Dear Lloyd
Although I agree with you that Peter Hoar's letter (Issue 50) did appear more cynical than strictly necessary, I feel that several of his points are ones I (sadly) have to concur with. Although I have been a faithful CRASH reader since Issue 11, I have decided not to renew my subscription as I, like Mr Hoar, feel that CRASH has been going downhill for some time. I am not going to accuse CRASH of daylight robbery or indirect bribe-taking (in the form of advertisement contracts), but I do sympathise strongly with Mr Hoar's points on adventure games.

I am an adventure game fan, like many others, and to me the difference between Derek Brewster's old reviews and the new ones is obvious. The first difference is an easily noticed one – Brewster had six summary ratings: Difficulty, Graphics, Presentation, Input facility, Response and General Rating, as well as five percentage ratings: Atmosphere, Vocabulary, Logic, Addictive quality and Overall. The latest reviews have only one rating – Overall – although *Knight Orc* in Issue 49 had eight ratings in all.

The next difference, a serious one, is the lack of detail in the newer reviews. Even the *Knight Orc* review – a Smashed game – only gave a very general impression of the first part of a three-part game. More detail would not have gone amiss – some more quotation to give the flavour of the game, some description of the complicated parser (giving, as it does, commands such as FOLLOW, GO TO, RUN TO etc), some mention of the way the characters interact (DENZYL, GET KNIFE AND RUN TO CASTLE), mention of the RAM SAVE/LOAD or OOPS options on the 128K version, and so on.

Another serious difference was not in the reviews but in the SIGNSTUMPS section – I was worried by its complete disappearance just after Derek left – 'they're not going to drop it now that he's gone, are they?', I thought at the time, and felt incredulous when I turned to the SIGNSTUMPS section in Issue 50. The unthinkable had happened – twice – yes, CRASH published TWO COMPLETE (almost) SOLUTIONS! Not only this, but it had happened once before (in Issue 41) and this incident had turned out to be the work of 'an arcade-nervous joystick jocky' at CRASH towers. The worthy Mr Brewster apologized profusely on behalf of this unfortunate being, and assured us it would not happen again. It didn't . . . until he left.

It is very sad that whoever was responsible for this did not realise how the printing of such an obscene thing can completely ruin the enjoyment of a game or prevent people from buying it. This letter may not have been of such great importance in the two solutions in question, but the former still applies. It is not a simple matter to 'just not read it' – the temptation is too great for many adventurers (myself not included, as I do not have any of the games in question, but I know how people feel) who later curse themselves for their weakness. Lead us not into temptation!

Another point is the disappearance of SIGNPOST (I know this is a weak joke, but 'is that why more money is going to tipsters and map-makers as prizes?') – the adventure equivalent of the FORUM just upped and went, which is why I'm writing to the FORUM and not there.

Also, 'the policy is that full-price games are more important to review because people risk more money when they buy them' - if this were applied to arcade games as well, over 40% of issue 50's reviews would have gone.

Obviously, budget games are more numerous than budget adventures, but if there are so few budget and mail-order adventures that they can be 'rounded up occasionally' (I doubt it), why bother rounding them up? Surely such a small number could simply be reveiwed when they come out (I assume that Issue 50, by the way, contained such a 'roundup').

I also recognise that you are not personally responsible for editorial policy, and for this reason I am not basing any attack on you personally with this letter. However, you are, I'm afraid, guilty of faulty (unlikely) or incomplete (more probable) logic in your replay to Mr Hoar's letter. Derek Brewster's position as a writer of arcade games does not necessarily imply that the CRASH reviewers are adventurers. I am willing to believe that they do play adventure games (although it appears they play arcade games more often), but your somewhat incongruous reply seemed slightly unclear. (By the way, if the reviewers are such keen adventurers why do you later on in the magazine state that 'an interest in adventures would be useful' for new CRASH employees? I hope it is because CRASH is trying to repair, in part, the gap left by Derek Brewster).

I do hope CRASH is not

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gradually phasing out the adventure game world. It may be, and it will sadden me if this is so, that CRASH is merely reflecting general interest in these games – maybe adventure games are doing worse in questionnaire-type surveys – or perhaps a tendency in the computer game world to cater less and less for minorities such as adventurers or strategy gamers (I do not play many myself, but I have noticed that the strategy section of the magazine is also dwindling and In issue 50 is pushed up against the adventure section – are they to be eventually rounded up into just an 'adventure and strategy' section?)

Perhaps these developments are only a temporary disturbance. My subscription is still good for a couple more issues – maybe CRASH can persuade me to change my mind and renew it. I certainly hope so.

Simon McGregor, London NW3

I certainly shan't apologise for my reply to Peter Hoar's letter, because if people write stupid and calculatedly offensive letters full of deliberate misinformation and cheap inuendo, then they can hardly expect a sympathetic reply – even though his did earn him the bumper software bundle; the first time I ever recall awarding it in a fit of pique!

Everyone will have to accept (and may well expect) that when a talented specialist writer like Derek Brewster stops working for a magazine after four years, there is bound to be a very great change; and to be a touch cynical about it, no-one really likes changes (whether they be good or bad), which can often explain the more savage criticism in these cases.

It isn't really a case of not catering to what you refer to as 'minority' interests – adventures have always been important to CRASH – but they have become decidedly less important to software producers in general, simply because hardly anyone buys enough to warrant the cost of producing them.

The result has been, as we have all seen, that almost all Spectrum adventures available now come from independent individuals at budget prices on mail order. No, there's nothing wrong with that except technically the only way we can tell you where to get them from is to print the address and tell you what money to send, which in turn means we are legally bound to refund you in the case of your having any complaint, since the review effectively becomes an ad in such cases – and to be fair, why should we do that? But we have done so, consistently, for over a year now. Indeed, even Derek – despite being aware of the quality of some of these adventures – felt that the state of the Spectrum adventure market hardly warranted all of his time on every issue.

And there is a significant difference between a budget arcade game from a company like Code Masters, widely available in numerous shops in its thousands, and one from an individual, produced at home with a run sometimes only in the low hundreds and available only by post at the risk of the sender.

Among the new reviewers working on CRASH, and generally at Newsfield, are several who not only enjoy playing adventure games and do so regularly, but are also quite expert on the subject itself (why take arcade experts who enjoy the occasional adventure off their job for one that always takes so much more time to assess? – the reason for the wording in the ad you refer to). Their impact has hardly been felt. All I can ask you to do is be patient enough to see how they work out. No editorial policy here at Newsfield is cast in concrete; things change all the while. Quite possibly adventures won't merely be round ups, and certainly strategy and adventures are not intended to merge in the near future. The results of our next CRASHtionnaire will be interesting – tell us how you feel about adventures that way – as you told us that Ocean was the best software house last year in the Readers' Awards . . . did Ocean bribe all of you to vote for them?

I hope you feel, Simon – since your letter was constructive and polite – that I have answered it more logically and completely than you think I did Mr Hoar's.

LM

What an exhausting set of answers that proved to be! Sorry if it sounded long-winded, but sometimes you can't do a reply in two lines. How about a few more constructively jolly letters next month?! And if you have something to say, send it to . . . LLOYD MANGRAM'S FORUM, CRASH, *PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB*. I'll try and fit you in.

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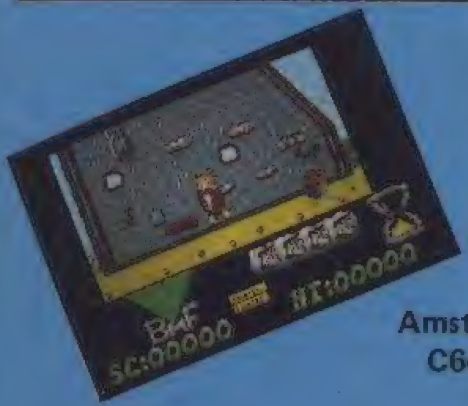

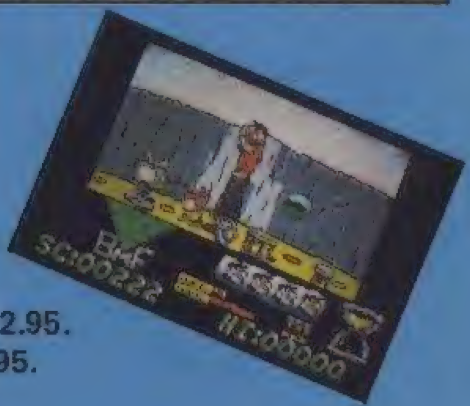

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THE BEST OF BRITISH

Between 1984 and 1986, when games were getting big and the software world became an industry, the most famous, most praised and most successful software house was Ultimate Play The Game – but the programming stars of Atic Atac **and** Knight Lore **were secretive and gave no interviews.**

In 1986 Ultimate began to fade, and by 1987 it had virtually disappeared.

But under a different name Ultimate was working on a new project – and could soon be back at the front of the next revolution.

A few months ago, former CRASH Editor ROGER KEAN was asked by Ultimate to hear the inside story on its history and future . . .

ULTIMATE PLAY THE GAME became a household name in software households just weeks after *Jetpac* and *Pssst* were released in 1983, getting the company's Spectrum career off to a scorching start. The packaging boast of 'arcade quality graphics' was more justified than for any other game of the time, and the gameplay and sheer fun to be had from Ultimate's first releases was astonishing – they were packed into only 16K of memory.

Two more 16K releases followed – *Cookie* and *Tranz-Am* – and when CRASH was launched in 1984 we were treated to the even more complex 48K games, *Lunar Jetman* and *Atic Atac*. Between 1983 and 1986 Ultimate had an unbroken chain of 14 Spectrum hit games; most were reviewed in CRASH, and their Overall ratings averaged at 93%, making Ultimate the magazine's most highly-praised software house of all time.

Ultimate's quirks as well as its games made it legendary: for instance, Ultimate Play The Game was actually the trading name of Ashby Computers And Graphics (ACG), immortalised in *Atic Atac*'s Key Of ACG and *Sabre Wulf*'s Amulet Of ACG.

It all made for good stories, so computer journalists clamoured over the phone and even hammered at the front door for that all-important exclusive interview. But the harder everyone tried, the more adamant Ultimate became about its press silence – and indeed very little was known about the software house, which never even showed its wares at exhibitions after one early experiment.

The nearest anyone got to a foot in the door was when CRASH found some favour with Ultimate's nearly-invisible owners. They ran several competitions and even promised an interview – but always only after the next game was completed, and that tomorrow never came.

FAMILY BUSINESS

Based in the Leicestershire town of Ashby-de-la-Zouch, Ultimate was wholly owned by one family: two brothers, Chris and Tim Stamper, and Tim's wife Carol. With one or two other programmers – or 'software engineers', as they prefer to style them – the Stampers were Ultimate.

The two brothers had started as designers of real-life arcade-machine programs – but they made no marketing mileage out of this coin-op background, exotic enough in those heady early days (and still rare in Britain), preferring to stay in Ashby-de-la-Zouch and produce games.

And it was as though the games really did speak for themselves: magically, Ultimate avoided the criticisms usually attracted by standoffish organisations in the professionally friendly entertainment trade.

Each Ultimate release was eagerly awaited, and whenever a game was delayed magazines were flooded with complaints, as though the editors could do something about it. And when rumours circulated, originating from an all-too-unusual (and all-too-sparse) press release, that *Knight Lore* was to feature an entirely new three-dimensional concept with superb animation called Filmation, anxious readers ran riot with their letters.

> **"Basically we're all arcade players and we're all arcade addicts"**

REVOLUTION AND DEFEAT

Knight Lore was revolutionary. It brought about a new genre, the forced-perspective (or isometric) 3-D arcade adventure; one CRASH reader has claimed it became the second-most-cloned piece of software after the word processor *WordStar*.

But by the end of 1985 it seemed Ultimate's magic might be waning, though veritable hero-worship kept the company's profile high till well into 1986. Something had gone: the flair seemed missing, we wondered if the originality had ossified, letters kept sadly referring to the 'once-great software house'. Inevitably, when someone has been on top so long detractors start sowing seeds of gloom, and as Ultimate slid CRASH readers' letters were harping on the similarity of so many later Ultimate games.

Looking back, though, it seems incredible that Ultimate kept its supreme position for so long, always producing original games that went straight to the top of the sales charts. Despite its fall from fame, it remained a major label, and after a rumour that Ocean had bought the company it was announced that in fact US Gold had won out and taken over Ultimate.

The terms of the sale were obscure; the Stampers retained a majority shareholding, and Ultimate games continued to appear, though to less and less acclaim. But a clue, shrouded in the mists of corporate obscurantism, lay before all: the small, typically mysterious, 'concept and coding' credit for some of the later Ultimate games – Rare Ltd.

RARE

The Ultimate software label has been largely dormant since mid-1987, and though the Stampers still have an interest in it, 2 years ago they formed a new company, Rare Ltd, and moved from Ashby-de-la-Zouch to the nearby village of Twycross. It's there that the Stampers are working on a new generation of games, and it was there that they gave CRASH the Ultimate story.

Twycross is a tiny Midlands village perched on the borders of Leicestershire and Warwickshire, known only for its zoo. Sitting on the western edge of the village is a very large 18th-century mansion, part of Manor Farm.

This is the home of Rare, protected by rambling outbuildings, barns and a crowd of noisy cockerels and chickens. It's an elegant though rather dilapidated building, gradually being repaired by the Stampers, and its calm, very country-English exterior belies the power of the technology within.

The inside is half-finished, but in the board room a row of clocks on the wall shows the times in Japan and America – all part of Rare's international market.

And what illuminates Rare's operation is the Stampers' intimate working knowledge of their hardware. Very little equipment in the mansion is as it came from the manufacturer; even the modest Amstrad PCs have been given vitamins. That's the style of the two former coin-op designers, of course, and it was their technical knowledge of the Spectrum as much as their imagination that kept Ultimate playing the game so long.

WHY ULTIMATE FADED

I started with the most obvious burning question: why did Ultimate disappear about 1½ years ago? Perched on the edge of a massive desk, 32-year-old Tim Stamper, who acts as the company's business spokesman, thought for a moment and then corrected me slightly.

'I think for us, as the main development team, possibly 2 years ago was the time. It wasn't really conducive to company expansion to carry on producing on the Spectrum – unless we went along the budget route . . .'

That's what people said at the time: that Ultimate had gone as far as it could with the Spectrum. But what about the 1987 games like *Bubbler* and *Cyberun*? Tim insisted that was the post-Stamper Ultimate's work.

'They were not really our involvement. We said, "Ultimate, if you're developing on Spectrum, carry on doing that" – we're still the majority shareholders in Ultimate, so we still take an active interest in the company.'

Chris – at 29 the younger, quieter brother, who concentrates on coding – broke in: 'What was the last one we developed as a team? It was *Gunfright*, I think. Everyone was copying our *Knight Lore* concept, so we thought we'd do one as well! Get a little bit of the action!'

But even before *Gunfright* Ultimate had come in for magazine criticism – *Sabre Wulf* is a copy of *Atic Atac*, *Alien 8* is a copy of *Knight Lore*, and so on.

'It was funny to read the reviews,' recalled Chris. 'A lot of the earlier reviews were actually incorrect. It never really affects you. You know whether the product's good or bad.

'I think the only criticism we would be aware of was the sales, and the sales were very good.'

Tim observed: 'CRASH always gave us fair reviews, but with some of the other magazines, if we didn't advertise, the product got a bad review – and I was actually told by a few of the other companies that they thought the problem existed as well – and I'm sure it's still there now.

'So we steered clear of speaking to anyone, and if they liked the product great, and if they didn't I wasn't bothered, because if the sales were there people were buying it.'

FANS

Most software houses get as much criticism from letter-writing players as they do from reviews. But Chris said 'we had hardly any letters written to Ultimate which actually complained. We had tremendous fan mail, though, 50 to 60 letters a day, and had to have someone fully employed just to deal with it.'

More cloned than *Word Star*, *Knight Lore* set a new standard

Talk of fan mail prompted Tim to make a point. 'I think we had an opportunity to capitalise on the sort of fan club Ultimate created. So many people wanted more information on Ultimate, and sweatshirts and caps and that.

'We could have expanded, like some companies did, with a large fan club and giveaways and posters to buy, and we could have said "If you like Ultimate, buy the games, buy sweatshirts", but in fact we gave them all away.

'If anyone asked us for a sweatshirt or a cap we said "Well, you can have it . . . or posters". We were just interested in seeing the software out there and getting fair reviews.'

Chris and Tim Stamper, the mystery men behind Ultimate's success

QUALITY CONTROL

Today's software houses, anxious to keep buyers happy with bugless games, regard playtesting as essential. But despite Ultimate's string of hits, the Stampers never employed hordes of young playtesters as the old Imagine used to.

'We rely on friends and friends of the family,' said Chris, 'usually people a lot younger than ourselves, to play the game. We like to see their reaction to the game from fresh. It's very easy for us to see what the problems are when they start to play the game. Basically we're all arcade players and we're all arcade addicts.'

No game is perfect, and with hindsight the Stampers can often see something they should have done better.

'But when we've finished a game, all we can see is all the hard work that went into it. It takes a long time before you can look at it with a different eye; you always remember all the problems and all the concepts that were thrown out, all the stages of development.

'It's easier to look at a product you haven't worked on, because you can look at it with an open mind. It's so difficult for us to criticise or comment on our own games.'

MYSTERY

A mystery in one Ultimate game always annoyed even the label's staunchest

***Pentagram* – with everyone else copying their style, the Stampers didn't see why they shouldn't**

fans – so I demanded the definitive company answer. 'Was there ever a trailer in *Lunar Jetman*?' I asked.

After a cautious silence, Tim replied: 'Well, I never got far enough! I once saw a picture in a magazine with a trailer.'

Yes, I told him, that was in CRASH. A reader sent it in, but obviously it was a hoax – or was it? I added that the graphics looked very authentic. Tim merely laughed.

'I wish they had contacted us!'

And so the mystery persists. But mystery was Ultimate's fifth name. Was it a conscious policy to be mysterious? Was it seen as good PR?

'No it wasn't,' said Tim, 'that's the way it turned out, we were so busy producing a few products a year and making sure they were right. I think while we were full-time Ultimate, we only had two Christmas mornings off, and that's how hard it was.

'We worked seven days a week, 8am till 1 or 2 in the morning. I don't feel it's any good having engineers who only work 9 to 5 because you get a 9-to-5 game, you need real input.

'And the day a product was released the phone would just be red hot with all the distributors ringing. It was really bad . . . ' His voice trailed off.

'I prefer it here without those sorts of pressures,' Chris added. 'It's just a development place, the atmosphere for development we have in this place is excellent. It's a nice rural setting with chickens all over. It's a farmhouse and we want to keep it that way because it gives you something to refresh yourself.

'It's good for development, rather than being stuck in the middle of some suburb or city centre.'

Still, the 6-acre Manor Farm isn't really a working farm, explained Tim. 'There are a couple of horses here, and all we have to do is chuck them out in the field in the morning and bring them in again in the evening.' So there's no getting mucky for Rare's 13 full-time staff – they can concentrate on designing games.

HARDWARE HARDSHIPS

Everyone at Rare contributes to game concepts. 'We have so many ideas filed that game ideas are just never a problem,' explained Chris. 'It takes 6 months to develop a good game and by that time you've probably had three or four other ideas.'

'We scribble them down and file them away,' Tim went on, 'and then when we're ready to start a new team off, we just go through the files and decide which one to produce, which is best for the time of year and the current trends.

"When the Spectrum came out we thought 'what a piece of garbage!'. But there's something about it, to have lasted this long is amazing."

Continuing Sabreman's adventures, *Underwurlde* was eclipsed by the sophistication of *Knight Lore*

'But obviously a lot of the hardware can't handle it! 'One for the future!' we say. I'm sure everyone's got game ideas that could be produced on a Cray supercomputer, but it's getting them on a home machine . . . '

It must have seemed a step down for Tim and Chris Stamper, used to designing coin-op games and licensing them to America and Japan, to give up all that dedicated hardware and memory and work with the 16K Spectrum?

'The arcades armed us really well for the UK market,' said Tim, 'and when the Spectrum came out we had a look at it and thought, 'What a piece of garbage!'. Compared to arcade hardware it was, but it was *so* cheap. And Sinclair was such a clever guy to be able to produce that machine that loaded a cassette at that time – he was onto a winner.

'I think it was easy for other Japanese and English companies to copy, but for the home computer and the UK he really did it first, and it was just a colossal idea.

'A good design stands the test of time. It's just a pity they didn't upgrade it at the right moment. Possibly Sinclair was too involved with it and the good sales was he was getting – because there wasn't anything else cheap as that, or with the software range – just kept him on the same track.

'Still, it's an incredible machine and it made the British market, without doubt. I think it's very similar to the Nintendo in Japan. Nintendo must have been developing machines at exactly the same time as Sinclair.'

Added Chris: 'The UK really does lack a good games machine – maybe one of the 16-bit machines will fill that gap. But there's something about the Spectrum, to have lasted this long is just amazing.'

16-BIT DOUBTS

The Spectrum's extremely limited sound could have posed a problem for Ultimate's programmers – one common criticism in the old days was that Ultimate games needed better music and sound effects.

'Well, yes,' admitted Chris, 'but I think you had to decide whether you wanted to spend the processing power on the game or on the audio – you couldn't have it both ways.'

Today a Spectrum-owner will be stunned by the quality of rich sound on his first confrontation with a 16-bit machine – an Amiga, say. But neither of the Stamper brothers is particularly impressed by the much-hailed 16-bit revolution.

Tim Stamper: 'I haven't *seen*

Almost all of Rare's staff posed outside Manor Farmhouse. Left to right: Carole Stamper (company secretary), Tim Stamper (graphics director), Chris Stamper (software director), Rachel (secretary), David (sound dept), Mark (software head), Paul (software), Steve (graphics), Kevin (graphics).

CRASH REVIEWS

The Ultimate label

Alien 8	95% Issue 15
Atic Atac	92% Issues One & Two
Bubbler	78% Issue 41
Cyberun	90% Issue 28
Gunfright	92% Issue 25
Knight Lore	94% Issue 12
Lunar Jetman	95% Issue One
Martianoids	58% Issue 40
Nightshade	91% Issue 21
Pentagram	93% Issue 29
Sabre Wulf	Smash Issue 6
Underwurlde	92% Issue 12

anything on a 16-bit machine which was stunning. There are some good ideas, and sometimes the really good ideas are wasted because of the potential they have, because once they're out there and people have seen them, they say 'I don't want to see this again'.'

And the Stampers are sceptical about the size of the 16-bit market. Their philosophy is to be original and creative within a large market: in Ultimate's heyday, a game like *Sabre Wulf* would sell more than 350,000 Spectrum copies (far more than Activision's 1985 *Ghostbusters*, widely accepted as the all-time best seller at over 250,000 copies *on all formats together*).

As Tim said: 'When we find a machine that sells extremely well to warrant us producing on it then we'll produce for it. If a 16-bit machine is going to sell about three or four million, you can be sure we'll be out there with product for it. But if it sells 250,000 – I don't think any 16-bit owner is going to buy two copies of one product, so the maximum you can sell is 250,000.'

GAMBLING

The Stampers have always been attuned to commercial reality, and admired as Ultimate's games were, it was a shock when their price suddenly went up in mid-1984 with *Sabre Wulf*. Like most Spectrum product, Ultimate games had cost under £6, but without warning *Sabre Wulf* was priced at £9.95. Wasn't Ultimate taking a gamble with its popularity?, I asked. It was Tim who answered . . .

'We were having a severe problem with the number of (illegal) copies. And I think going from £5.50 to £9.95 was a bold step we took. The price was was gradually creeping up, and I thought we might go the whole way and put the product out at a price which was realistic for the time involved in creating it.

'We were trying to create an incentive for the person who paid £9.95 to say 'Hey, you're not copying my game!'. I mean, alright, they may have traded it for x number of pounds, but they said, 'If you want it, you buy it'.

'And that was successful because we still kept the Number One position for quite a while. It didn't make any difference to sales. They were still good products for the time. I think possibly *Knight Lore* was ahead of its time, and in looking back at the market now, there doesn't seem to have been any vast improvement in the 2 years since we left it. I don't know whether we could have made any more of an improvement.'

AHEAD OF THEIR TIME

'*Knight Lore* was finished before *Sabre Wulf*,' Tim suddenly said. 'But we decided the market wasn't ready for it. Because if we released *Knight Lore* and *Alien 8* – which was already half-finished – we wouldn't have sold *Sabre Wulf*.

'So we sold *Sabre Wulf*, which was a colossal success, and then released the other two. There was a little bit of careful planning in there. But they could have had *Knight Lore* possibly the year earlier – we just had to sit on it because everyone else was so far behind.'

Careful planning is the hallmark of the Stampers. They recognised long before anyone else that they had done everything they could with Spectrum games, and thus phased Ultimate out. But that was only one reason for the Stampers' move: and having dropped the *Knight Lore* bombshell, Tim dropped another.

When Ultimate bowed out, most people in Britain had heard only the faintest mumblings about the Nintendo. But Chris and Tim had discovered the dedicated console through their contacts in the Japanese coin-op industry, and started planning Nintendo games about the time they were coding *Lunar Jetman* – 1983!

'We managed to get just about all the software available for the Nintendo then,' said Tim. 'For the price it was available for in Japan then, it had colossal potential – we looked at this and we looked at the Spectrum – and then the Spectrum was hot stuff, but this was incredible. So we spent 8 months finding everything out about this system, and then started to write on the machine.'

'It was a sort of introduction process,' Chris said. 'We had to show Nintendo that we had the capability before they could give us the rights to go ahead and produce for their system.'

And as a result of their foresight, Rare is already competing with the big names in Japan: Konami, Nintendo, Sega and Taito. The Ultimate people could do for the Nintendo now what they did for the Spectrum 4 years ago.

BOOMING MARKET

'We knew a market was going to boom in Japan and America,' said Tim, 'and we set Rare up to handle that. Obviously we didn't want to give too much away because we needed time to develop our associations before everyone really became aware of it.'

'A lot of UK companies are beginning to look overseas,' Chris added, 'and to look at machines which are not available in the UK. We did that 2 years ago. And I think it puts us in a very unusual situation.

'We now have four freelance teams, and they are really trying to take advantage of the situations we developed. There is not another company in the UK that has the opportunities that we do at this stage, basically because it all takes time, and we're 2 years ahead.'

Tim: 'We actually act, I suppose, as Nintendo's development team. If they feel they are lacking a product on a machine, they tell us, we develop it, and so we are sure of licensing product to them. The majority of companies, like Konami and Taito, construct a deal with Nintendo to produce a product for Nintendo to market.

'But they are limited to however many titles they can produce a year. We license product to Nintendo, and we are not limited to a number of titles. In fact we've licensed more product this year than any other company.'

POTENTIAL

Rare has seven Nintendo products either finished (one was done 2 years ago) or nearly completed, and another eight in development. They've all had to be designed with the tastes of the Japanese market firmly in mind.

'There is a difference in style and there is a difference in what makes a good game for the US and Japan,' mused Tim. 'I think we understand now what that difference is. And our success rate proves that.

'Japanese games sell very well in America and American games sell well in Japan – and in England – but English games don't do well in America and they don't do well in Japan.'

Rare hopes to be able to help programmers understand the essential differences. In fact, one reason for giving this interview was to appeal for freelance programmers and development teams to contact Rare – the Stampers' team needs backup in producing both Nintendo games and original coin-ops. On the coin-op front, Rare has developed an extremely fast and powerful 64-colour arcade board. Called the Razz Board, it's based on the Z80 processor with a lot of hardware assist, and 14-voice Yamaha synth chips for the sound.

Another Rare idea is growing in the large, airy barn just outside the mansion, where Tim hopes to construct studio lighting and turn his graphics into animated movies for viewing on computers. The price of memory is dropping, so that future could come soon.

But 'very few people know we're here,' said Tim, 'very few people know what we're doing. And I'd just like to make people aware of the fact of the very large market out there and that they can take advantage of it through us.'

And Chris finds it surprising that so few British programmers and software houses have seen the huge potential of the Japanese market.

'With all the talent in the UK and with all those thousands of people writing games, I feel it should be UK companies producing the Number One arcade games and then everyone in the world following that – because Britain's got the best talent, without a doubt.

'I think this country's very conducive to that – it's cold, it's damp and everyone's sitting indoors programming. Britain should be producing the Number One games, and it's not happening. I feel that as a company we are the only ones beginning to get somewhere towards that.'

There's more on Ultimate and Rare in Issue Four of CRASH's multiformat sister THE GAMES MACHINE

***Sabrewulf*, written after *Knight Lore*!!**

At times strongly reminiscent of *Underwurlde*, this is *Wizards And Warriors*, an original Nintendo game

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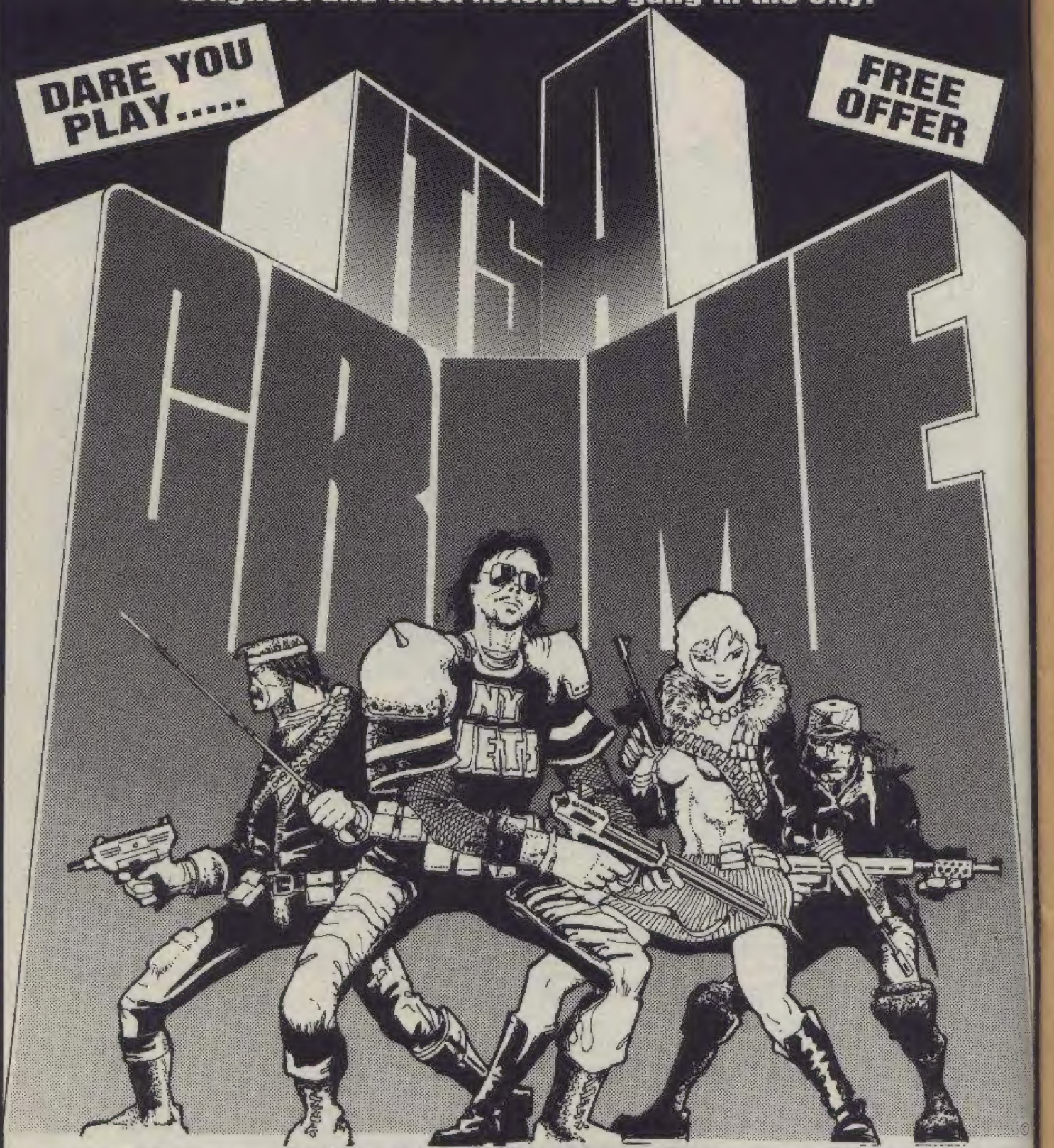

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1987 PBM MAILBOX

OH! WHAT A LOVELY CONVENTION

BRENDON KAVANAGH reports on the pomp and razzamatazz of the third British PBM convention, and reviews some exciting new PBM games . . .

What a sellout! Held at the Porchester Hall, London, on the 20th February, an estimated 1200 PBMers visited the third British PBM convention – it was busy to say the least! Many companies had stands, and there was plenty on display.

RAIDERS!

A new company on the scene was **MJR GAMES** (4 Higher Lidden Road, Penzance TR18 4NZ), who were displaying their new game *RAIDERS OF GWARAS*. This is a Fantasy RPG set upon the world of Gwaras, which is divided into fifteen completely different countries – one of which you come from. There are 37 types of race (thirty of which are humanoid), and you must also decide your character's occupation. Character progression is achieved by developing a variety of attributes – if you character does so-and-so, attribute 'x' increases as a result of experience. All said and done, this FRPG of hand moderated character development seems to be a quality offering, and at £1 per turn you certainly can't grumble. Start up costs £3 from the MJR address (this includes a free turn)!

AN AUSSIE OFFERING

SPELLBINDER GAMES are now old hands at the PBM hobby (36 Buller Road, Barking, Essex IG11 9UA) and as such have successfully negotiated with the **AUSTRALIAN WIZARD** company to run their game *WORLDS IN CONFLICT* in the UK. The game is very similar in style to the TV epic (sic) 'V', with alien invaders and freedom fighting humans (the player can be either).

I feel that this sums up *WORLDS IN CONFLICT* very well indeed. It looks like a good game (but a complex one; Spellbinder don't recommend it for beginners) and is played on a convincing map of the world as we know it. The game has the usual features of attributes, technology levels etc and the combat and economics look fun. Send an SSAE to Spellbinder for further details.

OTHER NEWS

HISTORICAL ENGINEERING are launching a new game from The Stable, The Temple, Great Wilbraham CB1 5JF on May 1st. A game is entitled *WORLD WAR II* where the player takes the role of a powerful wartime personality. It certainly sounds fascinating.

WAVENEY GAMES (28 Diprose Road, Corfe Mullen, Wimborne, Dorset BH21 3QY) have launched a simple simulation of the Stock Market entitled *SPECULATE!*, which should appeal to the economically minded.

MITRE GAMES (Unit 6, 9 Brighton Terrace, London SW9 9DJ) report that they've bought rights to *TRIBES OF CRANE*, while **DIGGER GAMES** have just released the impressive *STREETWISE* – I'll let you know more when I can find their address!

LABORATORY have introduced *MAGELORDS OF DORM* (for info write to The Laboratory, 18 Ridge Nether Moor, Liden, Swindon, Wilts SN3 6NB which is a development from their previous game *FURTHER INTO FANTASY*. Start up is £2 and turns cost £1.50 thereafter. Worth trying.

PROJECT BASILISK (PO Box 24, Sheerness, Isle Of Sheppey, Kent) has launched a new game entitled the very simple *CREEPHOUSE*, and costs £4.50 for five turns.

Possibly the most interesting new game at the convention was **VORCON GAMES**' (59 Juniper, Birch Hill, Bracknell, Berks RG12 4ZG) *THE TIME SENTINEL*. It costs £5 to start (including a few free turns) followed by a charge of £1.50 per turn. I can wholeheartedly recommend you to spend an SSAE for an information sheet if you're interested.

HARROW POSTAL GAMES (161 Butler Road, Harrow, Middlesex HA1 4DX) used the convention to promote their excellent licensed game, *THE WEAPON*, their quiet but interesting game *OMEGA VICTOR* and to launch their new game entitled *ALBION*, a computer moderated fantasy game which uses human moderation for special actions. From reading the rulebook it seems that the players of each race must work as a team to succeed, and thus it's fairly safe to assume that diplomacy is an important part of the game. This game would suit the strategist who enjoys convincing people to play his way. It costs £5 to start up, and turns cost £2 each thereafter. Meanwhile HPG have two more games under development: *VALE-IMPERATOR* about German barbarians struggling against Non Player Character (NPC) Romans, and *MOVING FINGER*, a time warp game due for launch later this year. I wait in anticipation . . .

We've all heard weird and wonderful games before, but how does *REVENGE OF THE MANY-LEGGED MAN-EATING MUTANT TIGER HOUNDS FROM OUTER SPACE* sound? It's from **ALCHEMISTS GUILD** (PO Box 114, Kidlington, Oxford OX5 1DS) and is basically a single character RPG set in a somewhat bemusing future society. The start up pack includes (among other things) a rulebook (brief but to the point) and a background book (some may like it, some may not). The game format isn't exactly original but the implementation certainly is. The designers have created a very amusing society to roleplay in. It's the brainchild of two young ladies: Amanda Kerr and Newsfield's very own Philippa Irving. Turns cost either £1.75 (standard turn) or £2.50 (as before but with a bit more detail) so this fortnightly deadline game may be out of reach for some of you, but those interested should certainly try to find out more.

The **ALCHEMIST'S GUILD** also has *MACEDON*, a twelve-player wargame. Send an SSAE to the Alchemist's Guild for more info.

A pleasant surprise for me was to bump into Jon Woodall and Andrew Dodd of **ODDE FELLOWS & CO** (designers and moderators of *MEGALOMANIA* and *ORDER OF CHAOS*). Andrew Dodd was proud to inform me that he finally had understandable info sheets for these two games – write to 'Stoneleigh', Holly Lane, Upper Ellwood, Glos GL16 7LZ.

By the way, did you know that the winner of the the dedicated C&VG game of *IT'S A CRIME!* was Paul Sculpher, who's also a CRASH reader! Heh Heh!

FANZINES

KIRKWOOD is a fanzine currently being prepared for launch from 'Legend House', 40 Green Ridges, Headington, Oxford OX3 9PL. Produced on an Apple Macintosh SE linked to a laser printer, the editor of Kirkwood hopes to use a combination of quality writing and high resolution computer graphic illustrations to create a high standard publication. One of the aims of KIRKWOOD is to introduce RPG players to the world of PBM, although the content will by no means be limited to topics encouraging this. The first issue will cost £1 and includes PBM based articles. All the same, this is a fanzine worth watching.

DARK BLADES

As far as the companies present were concerned, the most aesthetically pleasing game on display had to be **DARK BLADE** by *STANDARD GAMES & PUBLICATIONS* (Arlon House, Station Road, Kings Langley, Herts WD4 8LF). What a gem – Standard Games have managed to produce a boxed set starter pack (full colour of course) for a mere £5. A fiver for this sort of presentation, plus a full colour A2 map, a rulebook and two free turns isn't bad at all. Turns are only £1.25 each with no hidden extras – this one is going to be a winner.

ADVENTURE TRAIL

In the wake of Derek Brewster's more down to Earth reviewing methods, CRASH has been fortunate enough to engage the talents of one Samara, a shapely being of charm, wit and intellect who, from now on, will be guiding you on your travels through the twilight world of the imagination. Take it away Sam . . .

GUILD OF THIEVES

Rainbird/Magnetic Scrolls, £15.95 disk only

When *The Guild of Thieves* was voted Game of the Year, Spectrum owners went quietly green with envy. Now at last the game has been released for the +3 and all over the country adventurers are opening their shiny blue boxes with bated breath.

Inside is a game more than likely to live up to everyone's expectations. As a burglar, complete with stripy sweat shirt and swag bag, you have applied for membership of the Kerovnian Guild of Thieves. To prove your criminal eligibility to join, the Master Thief has devised a test: explore an island and thoroughly sack it of all available treasure before returning.

The adventure begins in the Master Thief's boat. You jump confidently to the jetty and begin a survey of the expansive countryside. The numerous locations range from castle to cave and from scrub to snow-capped peak. The descriptions, even without the graphics much-praised on other formats, are extremely atmospheric; even the most commonplace objects have their own characteristics. Exploration has some very realistic qualities: as you wander through the castle you can run your fingers casually along the piano keys or try your skill at potting the billiard balls.

The treasures are often quite easy to locate but difficult to collect. A jewel hanging from the ceiling of a cave is about to drop into a bubbling pool of quicksand; a silver chalice is inconveniently placed in the cage of a savage bear. Reckless burglars quickly come to grief!

The puzzles are often tough but at least have the virtue of being logical. The adventure is certainly more accessible than *The Pawn* which was occasionally open to charges of excessive obscurity. In *The Guild* it's sometimes the very obviousness of the solution which makes a problem difficult.

The parser is up to Magnetic Scrolls' usually high standards: as well as complex sentences it accepts FIND and SEARCH FOR commands to locate objects you may have forgotten or misplaced. The GO TO command lets you move from one location to another without typing in all the directions in between. In practice this can be quite dangerous as you can't stop the command once entered and

the program marches you straight into whatever obstacles (for example a closed drawbridge) there may be in the way.

A small quibble is the absence of a RAMSAVE command. Constantly saving to disc gets a little tedious, especially in an adventure in which sudden death in the most innocent of locations is a constant possibility.

The Rainbird packaging comes with, among other goodies, a Contract of Service with the Guild of Thieves and a playing guide cleverly disguised as 'What Burglar' magazine.

This last item also acts as combined hint sheet and program protection: several problems are listed and a series of codes printed underneath. Enter these codes and a cryptic hint (but not one that gives the whole game away) is be displayed.

The Guild of Thieves easily lives up to its reputation: a well-crafted scenario, immediately accessible puzzles, and a flexible parser make this a must for the compulsive adventurer. Even at the comparatively high price, it's a steal.

OVERALL **90%**

JINXTER

Rainbird/Magnetic Scrolls, £15.95 disk only

From Kerovnia and *The Guild of Thieves* to Aquitania and the magician of Turani – Magnetic Scrolls' latest adventure deals with a land in which luck is running out . . .

The good fortune of Aquitania depends on the safekeeping of the bracelet created by its wise magician. The bracelet and its five lucky charms have become separated through the machinations of the notorious Green Witches in a bid for control of the kingdom. Meanwhile, in households everywhere, the odds are stacked in favour of misfortune: the land is jinxed.

Finding the right bus home seems an unusual stroke of luck – until you get run over disembarking. You recover your senses and realise that only a guardian angel could have prevented you from dying. Seconds later the Guardian (certainly not an angel by the looks of his sleazy herringbone overcoat) appears before you. In between bites of a cheese sandwich he hands you a memo and tells you that you have been chosen to recover the charms and use the bracelet to defeat the witches. Mission accomplished, he promptly disappears.

Although you begin on home ground outside your own front gate, a little exploration soon takes you to more exotic locations. Snorkelling, mousecatching, negotiating artificial waterfalls and underground passages are skills which must be acquired in the course of the adventure. The descriptions are well crafted and absorbing to read. A great deal of work has gone into including even more details than in previous Magnetic Scrolls adventures; the EXAMINE command almost always yields an atmospheric and humourous reply.

Aquitania's characters are depicted realistically. Burly bakers and prim postmistresses are oblivious to the seriousness of your quest – they're far too busy with their own lives. To get them to break off and pay attention it is necessary to project your imagination towards their needs rather than your own. Interaction is often a matter of tactful co-operation.

Object orientated puzzles are of more than average difficulty but none of them are insolubly obscure. There are often several ways of completing a puzzle and all of them are logical, though some may require activation of more than the average number of brain cells. What seems obvious at first often turns out to be a red herring; the game has a nasty sense of humour . . .

Death is an impossibility (an innovative feature in an adventure game) as the Guardian always appears in time to save you. This makes the game accessible to beginners as well as seasoned adventurers and does nothing to reduce the element of risk: false moves early on can still cripple progress later in the game. Fortunately there is a SAVE (though no RAMSAVE) option.

Magnetic Scrolls' parsing improves with every game, and *Jinxter* accepts most complex sentences and synonyms.

Surprisingly, the GO TO command introduced in *The Guild of Thieves* is absent, possibly because the complexity of the landscape would have made it too difficult to implement.

One small drawback, noticeable because it's practically the only one, is the longwindedness of some necessary game procedures. You may be standing by a door with the relevant key in your hand yet you still have to type in several commands if you want to go through it (UNLOCK DOOR WITH RUSTY KEY, OPEN DOOR, ENTER). The process is even more laborious where complex actions, for example striking a match, are concerned. No special skill is required to work out how to open a box of matches and take out a match, so why the need for a series of pedantic commands? A feature which allows the program to perform the action for you would have been a welcome addition to an otherwise excellent game.

The Pawn was open to charges of obscurity; *The Guild of Thieves* improved on that and *Jinxter* shows even further improvements. Its quality is apparent from packaging to plot and can only leave you wondering what weird and wonderful developments the future holds.

OVERALL **92%**

LOADS OF MIDNIGHT

CRL, £9.95

Beyond the lands of Midnight, the age of technology has caught up with the world of role playing and adventure. The magical crown of the old king Ludwig has become a much-coveted object in the battles for sales and software success. At present Ludo, owner of a small company and Ludwig's son, is in possession of the crown. He must prevent it from falling into the hands of the wicked Gloompork at all costs. Unscrupulous and proud, Gloompork is driven by an overwhelming desire to use the crown's power to become the ultimate software giant. Ludo and any followers he can recruit must gain the cooperation of other inhabitants of the land, before finally taking the crown north to the Tower of Doom, and destroying it.

The world through which you pass bears all the characteristics of the parodied Beyond game, irreverently recreated. The graphics, with their bleak outlines of peaks and hills against even bleaker skylines, are almost indistinguishable from the originals. On-screen messages appear to inform you of the passage of time, and wolves, more indifferent than hostile, occasionally appear to stare piercingly into your eyes.

As a spoof it's very slick, but this slickness ultimately lets the game down. The scene is carefully set at the expense of the puzzles and gameplay. Travelling through the recognisable landscape is fun at first but interest soon wanes as it becomes clear there's little else to do. The parser is quite flexible and the phrase, 'Tell me about your problems' occasionally gleans interesting replies but could have been developed further. There is a RAMSAVE option and graphics can be switched off for extra speed.

All the elements of a competent game are there; unfortunately they don't quite gel into a good one.

OVERALL **55%**

► Imitation is the sincerest form of flattery . . .

ADVENTURE TRAIL

FEDERATION
CRL, £9.95

It's a good job you have a strong sense of responsibility because once again the fate of the Universe lies in your hands. As a member of the Federation's secret service you have been assigned to the case of Erra Quann, the alien scientist who hijacked the Flagship Quann Tulla in order to sell the secrets of its engine plans to the evil Empire. Should he reach his destination, the Federation will be powerless to combat the forces of the Empire who can then step in to dominate the known Universe.

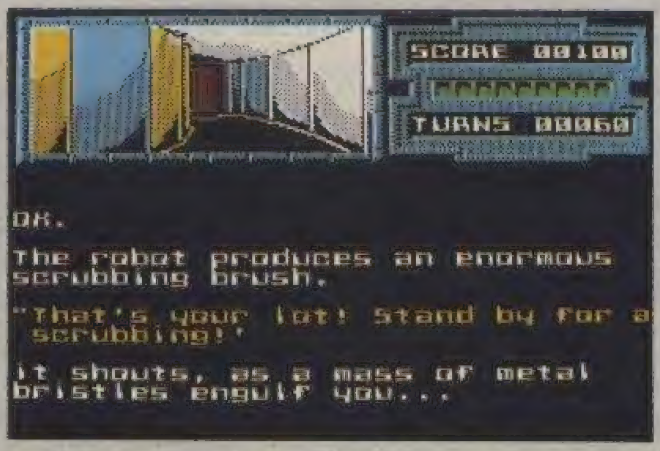
The adventure begins in a leaking air bubble on board your ship. Sparks are flying from the instruments and black smoke obscures everything. You can't breathe, so your first objective is to find air. Once this initial urgent task is completed you must find your way through the shattered hull of the flagship and survive long enough to continue the investigation on a distant alien planet. The adventure winds through a series of cargo bays, control domes and futuristic corridors, and the suitably atmospheric descriptions are complemented by a small selection of graphics and a visible sci-fi score display.

At first, apart from a few surly droids (which must be treated tactfully) you are alone. Objects are scattered around to help you and range in complexity from a neon weapon to a humble tube of glue. The puzzles, mostly involving the use of these objects, are challenging but not infuriatingly difficult. Sudden death is an ever-present danger but special commands include a RAMSAVE option.

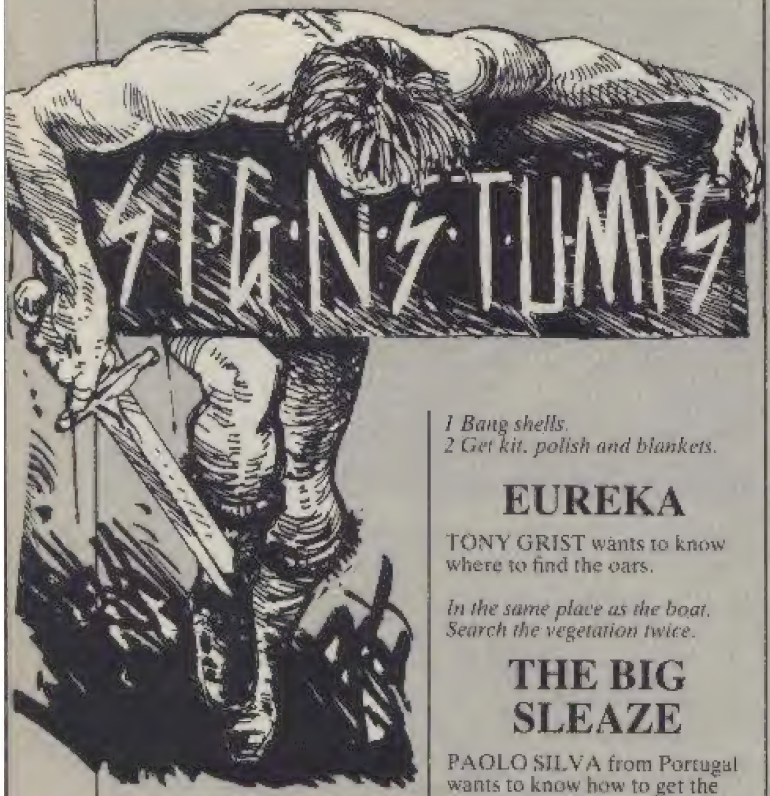
The game has quite a large vocabulary and although it won't accept complex commands it does have one labour-saving feature (interestingly, one that is missing from the two highly sophisticated Magnetic Scrolls adventures reviewed this month). If, for example, you have the key to a box there's no need to go through all the rigmarole of saying UNLOCK BOX WITH RED KEY, you simply type UNLOCK BOX and the computer knows which key to use. This is particularly useful when you have to perform more involved actions with other objects (play the game to see which ones). In effect it compensates for the parser's lack of complexity and eradicates the infuriating problem of knowing what to do with an object but not knowing how to say so.

CRL's version of the sci-fi adventure doesn't break any especially original ground but within the limits it sets itself it is a compelling and highly polished game.

OVERALL 78%



► *Federation* **positively bristles with excitement**



KENTILLA

B MONKMAN from Hornsea asks:
1 'In part three how do I frighten away the robbers?'
2 'How do I make a German uniform in part four.'

1 Bang shells.
2 Get kit, polish and blankets.

EUREKA

TONY GRIST wants to know where to find the oars.

In the same place as the boat. Search the vegetation twice.

THE BIG SLEAZE

PAOLO SILVA from Portugal wants to know how to get the aeroplane in Central Manhattan, what to ask the librarian and how to get through Central Park.

Buy the aeroplane with the wad of German notes. Whisper 'Maltese Bullfinch' to the librarian. Negotiate Central Park between 6 am and 6 pm.

LORD OF THE RINGS

IAN FLYNN can't get into Bree or cross the bridge at the end of part one. How is it done? Well . . .

Knock on the hatch, give your name and wait. To cross the bridge after you have killed the riders, become Frodo.

CUSTERD'S QUEST

'How do you kill the Necromancer without him firing his terminal lenslok at you?' asks a U2 fan from Harpenden (who also happens to be this month's *Rigel's Revenge* Superhero).

Throw the axe immediately after you have thrown the bomb.

SUPERHEROES

'I've just completed Rigel's Revenge at 7.00pm on the 7th of February. The following message appears on the screen: *Harper raised his near-empty glass, drowned its contents and replaced it on the bar with a flourish. A young man nearby said, 'Wow! This is nearly as amazing as the time you defeated the Leather Goddesses of Phuo! But whatever happened next?' Harper gave the boy a crooked smile and gestured towards his empty glass. 'Uh, Bartender!', the young man interrupted, understanding at last. Harper settled slowly back upon his stool, his eyes creased in a private smile.*

So claims an unnamed U2 fan from Harpenden, the *Rigel's Revenge* Superhero. Everyone else is stuck on this adventure, any hints would be appreciated.

MATT LUCAS

CHRIS BOND is stuck with the porcupines on the island – he can't get past them or the swamp.

Distract the porcupines by shouting. On the island climb tree and heed the warning not to go further south.

Stumped? Victorious? Send your tips and queries on adventures old and new to SIGNSTUMPS, CRASH, PO BOX 10, LUDLOW, SHROPSHIRE SY8 1DB.

The most interesting are published but personal replies are not possible.

HOW QUICK CAN YOU GET AT YOUR SAVINGS WITH A BARCLAYPLUS CARD?

CLANDESTINE COMMUNICATIONS

Plied by free drink, PAUL EVANS gets sociable on Micronet's new exclusive chatline

HI THERE! I'm back online with a new modem for my ST and I think the VTX has risen again from the dead. So it's back to normal and the long promised *Shades* article . . .

Just as I was getting ready to write it up, off goes the phone: it's David Rosenbaum from Micronet begging me to put back the *Shades* feature again in favour of Micronet's latest branchild. Before I know it I've got an operating manual, access to the system and a bottle of wine! Why wine? Well, it's common practice to have a press briefing over these matters, normally with lots of food and booze. However, Micronet decided to do things a little differently.

So, what is the latest add-on to the Micronet database? It's the launch of an idea that's been hanging around for quite sometime now but not many people have bothered with: teleconferencing. Teleconferencing is a sort of up-market version of the chatline: instead of the one-line chats 'netters are used to, you have a computer that can allow certain groups of people to chat away without being listened to by unwanted guests. The chats are confined to the group's screens only, you can allow certain people to chat but throw others out, and there are many 'channels' that can be used by different people – like a CB but without the interruptions.

Such a system has many uses: club meetings can carry on privately and business issues can be discussed. Until now, these systems have been used rarely and only by business men, but by the time you read this, Micronet will be offering their teleconferencing system to the public.

Micronet's version is called *TeleTalk* and runs on a modified PDP11. This is accessible via a gateway on Micronet page 70099911. The operating software was written by Neil Newell, the programmer responsible for the remarkable *Shades* scrolling software.

I logged on to Micronet as requested by Dave for the world's first on-line press briefing – hence the bottle of wine through the post. As I passed through the gateway I wondered if Micronet had got their wires crossed, since the opening screen was identical to *Shades*! However, I followed the commands given, created my persona and password, and was placed in the reception area. It turns out that the whole thing runs as an adventure! On typing 'look' in the command box I got the following reply: 'You are now standing in the thickly carpeted, finely decorated TeleTalk reception area and you feel immediately relaxed by the environment. West of you is the reception desk and to the east is a large noticeboard. To the north a long corridor stretches away, and above the doorway to it hangs a sign reading *To the conference rooms*. Apart from all this detail, there's a sign standing on the floor pointing southwest reading *Trader Vic's – this way*.'

Wow! *TeleTalk* is not an adventure, however: the style is such to make the whole idea more user-friendly and enjoyable, and allow interaction with other users. There is a large list of commands available to help you and these are easily discovered by taking the self-help lessons available on-line. The whole kaboodle is set in a conference centre (called Hotel California for some reason) and you can hold private discussions in any one of the 30 rooms available. If you want a general chat with anyone, then just go to Trader Vic's bar which is just a general chatline for the socially-aware person. You talk by using the commands SAY (message) to give a general message to everyone in the same room as you, or TELL (user) (message) to give someone a message that no-one else can listen to. The 30 rooms, however, are for more private chats: you can hold club meetings in them, or discussions on certain topics. One definite use would be meeting of *Starnet* or PBM 'ailiances' to plan their next move without the opposition finding out!

To use a room for, say, a conversation with a group of Spectrum enthusiasts planning to destroy some Commodore owners on *Shades*, the first thing to do would be arrange a meeting. This can be done in a few different ways: you can leave a message on each user's mailbox arranging the time to meet. It is impossible to arrange the room number as no booking service is yet available. The leader then arrives five minutes early and claims an empty room by going to the reception desk and obtaining the key to an empty room (in true adventure style). On the other side of the room is a noticeboard on which people can write messages. The leader announces on this which room the meeting is being held in. When the others arrive they can read the board and type the simple command GOTO (room number) whereupon they are transported outside the required room. The leader is already waiting, so they can enter and start the meeting. Easy! However, what's to stop the enemy getting in? Even easier! The door acts like a censorship system (yes, I know it sounds crazy): it has a lock and a blind on the window. If anyone is to be allowed in, you just leave the door open; if you want to know who is coming in, then leave the blind open and lock the door. The person on the other side can knock and look through the blind to see who's inside. The leader can hear them and let them in if so desired. If the blind is closed, then the conversation will not be interrupted in anyway: knocks can't be heard by the people inside and anyone outside is unable to see who is in.

If the leader does not like what someone is saying, he can silence them by typing MUTE (name). This person's comments will now be unheard by anyone in the room until he leaves. If someone starts causing trouble the leader can throw them out of the room with no resistance, the keyholder has complete control over the conversation and room, so the leader can formulate a plan, go onto *Shades*, and kill every Commie in sight!

What I have just outlined is just some of the many commands available to the *TeleTalk* user. You can leave messages to each other by writing MEMO's. These are stored in you 'Memobox' and can only be accessed on the *TeleTalk* computer. If you need someone who you know is on *TeleTalk* at the same time, then you can use the PAGE command. Everyone on *TeleTalk* carries a radiopager on which people can call you if needed.

Many adventure-style commands are available, such as INVENTORY and READ (object). You can even type KISS (name) with success! I suspect that many commands are undocumented and are left up to the user to discover.

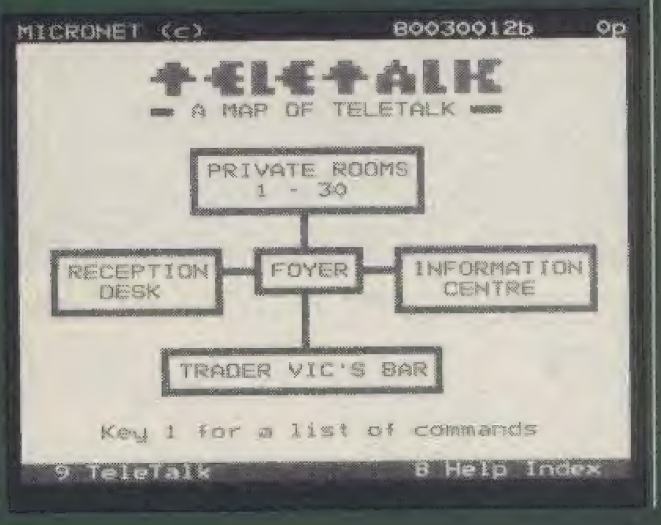
Other aspects of the system include the information centre. This area contains a self-teach system for first-time users, a news section and a file centre where archives are kept (?). I suppose there will be a large amount of gossip and amazing happenings flying about that will add to the atmosphere. We will have to wait and see.

So that's the theory, what about in practice? My first experience of *TeleTalk* in action was at the aforementioned press on-line briefing. Initial reactions were 'slow and confusing': the normal scrolling service now available to *Shades* users has not yet been implemented on *TeleTalk*, although it's promised soon, so you have to make do with *Viewdata* scrolling. While this is a very good piece of software, it's still a bit confusing. Sometimes it doesn't give you chance to see what's going on as it is rather rapid in rewriting the area of the screen you were trying to read. However, after about five minutes you get used to it and it soon becomes no problem. The same applies to the speed. I said it was slow, but when you compare it with the normal chatlines, it easily outpaces even *Turbo* as the chat appears near-instantly. It just seems slow as your mind thinks it's playing an adventure where responses are supposed to be instant. When the scrolling system gets underway it will be a joy to use. There is only one thing that really gets to me about it and that is the timeout feature. If you do not use the system for more than one minute it asks you to key hash before allowing you to type anything. Not so bad you may think, but it often happens when you're just finishing a long sentence, which is then lost. After a few attempts at the same sentence it could make a grown man cry! Besides these niggles, and the tedious typing of SAY or TELL before each sentence, *TeleTalk* is really fun to use and is a lot more versatile than other chatlines. It's ideal for any usage and very convenient. Definitely worth the Micronet subscription if you just use *TeleTalk* alone! It's a good replacement for *Talkabout* addicts now the system is closing down, and Micronet's product manager, Phil Godsell, sees it as a lot more upper-class. Yuppienet here we come! One thought occurred to me as I was talking to Phil: chats are not monitored so room is open for abuse of the system. Perhaps a police service will come into force. Finally, a charge is made for connection to *TeleTalk* (ala *Shades*) but it will only be a few pence per minute.

That's all for this months. See you next time for the long-awaited *Shades* feature. Bye!

EXTRAS

TELETALK: Look out for CRASH meetings for Speccy owners conducted by yours truly on *TeleTalk*. Watch the noticeboard for details of meeting times etc.



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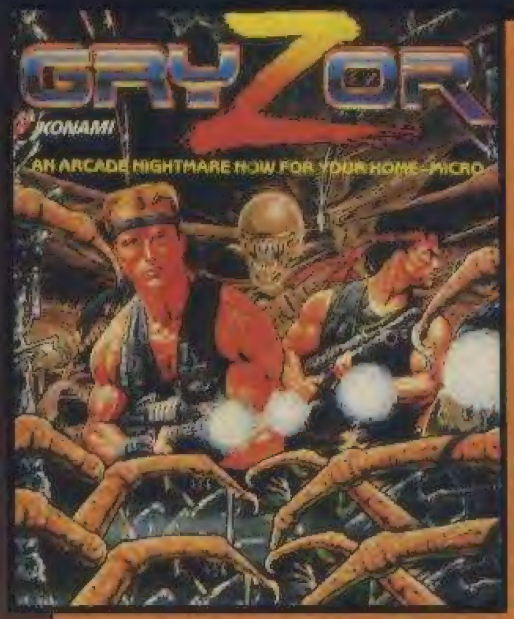

GRYZOR

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FRONTLINE

with Philippa Irving

ME, MYSELF, I

REVIEWS in FRONTLINE are printed for two purposes: one, so that you the reader can enjoy a fairly full description of games that you have no intention of buying. Two, so that, having enjoyed the description, you might decide that you do want to buy the game after all. The primary function of a review magazine like CRASH is undoubtedly to enable you to make sense of all the brightly coloured little boxes on the dealer's shelf, and to choose which ones you actually want to part with money for. I also think that it helps to circulate ideas and a general awareness of the computer gaming scene to add to your enjoyment of the hobby; I always prefer reading bad reviews, but for utilitarian purposes – that is, deciding what I want to buy – I admit that the good ones are more useful. And it has occasionally been the case that I've bought a game on the strength of a review to be disappointed in it; it helps to know the reviewer's methods and criteria. And so, for your own information, I shall describe mine.

Games are sent to me through the CRASH offices in Ludlow to my home in Oxford, sometimes weeks before I have to write the review, and sometimes days. No matter when they arrive, I always try to have at least two sessions on a game. Often, if I like it, and I have a lot of spare time, I play it much more extensively for the sheer enjoyment of it. If a game has extremely complex rules and lots of reading material with it I try not to be irritated by the extra time that entails, and remember what a delight it would be if I'd actually paid for the game. Software which arrives with instructions covering the back of an inlay has my sneaking sympathy, although I try to suppress it.

However, I *do* want to be forced to waste my time with a game, even if I don't enjoy having to plough through lots of salutory background material. A game which forces me to play for ten hours when I really only have two to spare has certainly got something going for it. Some games are impossible to play for more than an hour, either because I finish them on my first attempt (that always has me pulling out the plug) or because they're desperately boring. I usually go back to the desperately boring games a day later, to see if they improve upon acquaintance (several have, quite significantly); some just get played for another hour.

It's much easier to write a review of a game I've played extensively and enjoyed. The most difficult reviews to write are those of games which I can see are good but which I don't like or enjoy myself. I don't entirely subscribe to the view that reviews are necessarily a reviewer's personal opinion. I hope I can see that some games which do not appeal to me at all, and which I would never voluntarily play, have lots of strong and interesting qualities which readers who like that sort of thing will enjoy.

That's why my reviews are predominantly descriptive. I give my opinion very much 'for what it's worth', and try on the whole to let you the reader understand what sort of a game is on offer. But that doesn't mean that I don't occasionally enjoy doing a really bad review of a game that I can't stand . . . and I hope you enjoy reading them.

THE MORAL DILEMMA

Last year the question was raised in FRONTLINE FORUM about whether it's morally justifiable to base games on war. The correspondence raised strong feelings on both sides. It's an issue which probably has to be faced by any thoughtful wargamer, and is worth further discussion.

However, this isn't the place to debate the absolute moral issue of whether war is ever justifiable. The universal moral standard, that is always met – though never fully obeyed – in every society, condemns murder. But it also commends bravery, when it takes the form of defending one's immediate circle from danger; and it has to be true that this overrides the killing of another person, and does not categorise it as the murder which the same code forbids. Whether individuals choose to rise above this distinction and categorise all killing as murder doesn't alter the fact that the 'loophole' in human conscience is there, and that's why many sincerely good people have felt comfortable with the concept (and indeed the experience) of going to war.

So much for the irresolvable; the issue we're interested in is whether buying and playing wargames implies moral agreement with war in general is intrinsically wrong, or has nothing to do with the matter. Can you be an ardent pacifist and yet enjoy a game which simulates closely a historical battle? Or does such a game inevitably imply some sort of acquiesence in the fact of the battle? Should the large-scale slaughter of thousands of men (to put it emotively) be used as the background for a game?

The attitude of mind implied in the last question (one that's quite often raised, especially in connection with games based on recent conflicts like *Falklands '82*) is that a game is of necessity a trivial thing, because games are played for pleasure. Most mental activities voluntarily undertaken are undertaken in the expectation of pleasure. If you read about the battle of Waterloo under duress, it is because you are doing it as part of a school exam. If you read about it for any other reason, it is because you are interested; you mean – if you're honest – that thinking about it and finding out about it is enjoyable to you. If you decide to take history as your subject at university or college, you do so – at least at first – because you think you're going to enjoy history. Two years later, as you plough through the book on Waterloo at half past three in the morning, you may not see it like that, but basically your pursuit of knowledge about Waterloo is for your own enjoyment. The research historians who wrote the book presumably gained pleasure from it, too, but nobody would reasonably suggest that because people enjoy learning about, thinking about and even imagining the battle of Waterloo – a mater concerning the deaths of many men – that books about it are wrong. Logically this means that every unpleasant thing that has ever happened ought to be hushed up.

The fact that we have a game based on the battle is merely an extension of the principle. Those who play miniature wargames often have a genuine and elaborate historical interest in the subject, and so – sometimes – do those who play computer wargames. But it would surely be wrong to think that a serious, grown-up 'historical interest' would sanction something intrinsically wrong, if it *were* intrinsically wrong.

This holds true so long as the battle or war is a fact, which cannot be altered; and most wargames based on past wars are extremely deadpan, dry and factual. They reduced the experience to numbers, to a greater or lesser extent. If a particular game does not have a two-player option it is more often because of memory restrictions than any bias to one side. Even the potentially unsettling *Falklands '82* was an unemotional and dull a game as could be imagined.

It seems to me that wargames start to wander into dangerous territory when they approach the ideological: when they assume an inclination towards one side. Fantasy games irritate me in this respect, although of course they bear no relation to the real world; it is always the straight-limbed, clean-living humans from the south battling against the black and twisted evil ghouls from the north. On the other hand, people have as much right to write a game about a political opinion they may have as to write a book or an article about it. It doesn't follow that the act of playing the game will imply acquiescence with the view, any more than reading the book or article does.

I come to the unexciting conclusion that playing wargames has nothing to do with agreeing with or disagreeing with war. That remains as much a separate issue from wargames as it does from books describing wars. It is merely a different way of exploring the same material.

DREADNOUGHTS AT JUTLAND

Producer: **Specsim, *59 Chestnut Road, London SE27 9EZ***

Author: **W G Munro**

Price: **£14.95 (mail order from producer)**

The company which produces this game, Specsim, describes itself as 'an extremely small operation' with one previous game – *Carriers at Midway* – to its credit. I haven't seen this game but although it only sold to a few customers, their enthusiasm spurred on the author to attempt a more ambitious project; *Dreadnoughts at Jutland* is the result.

Although the material that comes with the program cassette is reproduced in an inevitably basic fashion, it is encouraging to see that for once an amateur concern has taken the trouble to provide the text, if not the frills, of full documentation. *Dreadnoughts at Jutland* comes with a substantial photocopied 21-page manual. The mechanics of the game and technical details about the ships are well described, but there is no summary of the battle itself. Although one can glean a fair amount of information about it from the rest of the material in the book, this is a serious omission. The author is clearly knowledgeable on the subject; he ought to have indulged his knowledge in condensed form for the benefit of ignorant players like myself!

As far as I can gather, the battle of Jutland took place on May 31st and June 1st, 1916. The First World War has never been anything like as popular with wargame designers as the Second, partly because it (presumably) contains fewer interesting campaigns and partly because it still exists in the minds of most people as an unjustifiable holocaust which ought not to be re-enacted as a game. However, sea-battles are different from the mud and squalor of the trenches, and it was in the First World War that machine first really met machine in combat. No machines were more glamorous than the new 'superships'. The first 'Dreadnought' was launched in 1906, the invention of Admiral Fisher. By the time it went into actual combat it had been modified into the battlecruiser – a design which relied on heavy guns and speed rather than armour, the theory being that a ship which was fast enough to get out of trouble quickly was at a greater advantage than one which was simply thick-skinned. The Germans also built battlecruisers, but they had fewer guns and were better protected. In battle, they proved to be the more successful design.

Dreadnoughts at Jutland recreates what the designer describes as this 'exhaustively analysed' battle. A preliminary look at the rulebook is enough to make it clear that this is a game full of grim technical detail, aiming at accuracy rather than playability. Games about naval battles seem to me to be either fatuous and shallow, or overly technical and machine simulation orientated; the only game that I can think of which strikes a balance between the extremes is *Silent Service*. *Dreadnought at Jutland* is not a machine simulation – there are no buttons to press, and no control over combat – but it certainly relies on factual accuracy, and focuses attention on the ships rather than the battle.

The player is given a choice between controlling either the British or German forces, or of a two-player game. The British forces are divided into two fleets, under the command of Admiral Jellicoe and Vice-Admiral Beatty, and subdivided into squadrons – the basic units of play. There are nine squadrons on the British side, made up of battlecruisers, which are dealt with individually and do most of the fighting, light cruisers, which have no offensive capacity and are used mainly for reconnaissance, and destroyers, which can only fire torpedoes. Squadrons contain only one class of ship, for the sake of simplicity. The light cruisers and destroyers are anonymous, but the battle cruisers have names and sets of statistics. Each squadron is under the command of a flagship.

The turn sequence starts with movement orders, given to each squadron rather than to each ship. The squadron can be ordered to change direction, by means of a compass bearing and speed setting. The maximum speed of each ship in the squadron can be discovered from the information screen that can be called up at any time, and although a squadron cannot be ordered to travel faster than its flagship's maximum speed, the speed can be beyond the capabilities of certain ships in the convoy. Maximum speed is one of the things that ships lose rapidly when they are damaged, and so it is easy for ships to lose sight of their flagship and fall behind. Keeping a squadron together, particularly in low visibility conditions, is one of the most important tasks in the game.

The main screen is a stylised view from the bridge of the flagship of the squadron currently under consideration. Various pieces of information are displayed in a basic fashion below the pictorial viewscreen: the time of day, the direction of the view, the current visibility, plus the course, speed and position of the ship. The screen shows a visual representation of what can be seen from the bridge, with reference, largely, to other ships. The player can choose to look with the naked eye, or go to two further degrees of magnification representing binoculars and telescopes. Ships seen ahead are identified by name, if visibility is reckoned to be good enough. When it is not, it is up to the player to decide whether the ship in view is friend or foe. There are no visual clues given in the rulebook, so this judgement has to be based on experience.

The position of all the ships on the map – or those, at least, whose position is known – is plotted on a graph, and a reading of this plot is available only at 15 minute intervals. While I accept that the plot took time to prepare, and that it is reasonable to expect to have an update only infrequently, it is frustrating not to be able to refer to the last plot while waiting for the new one. I also found it difficult to make sense of the information illustrated; it is not at all clear what represents what on the on-screen diagram.

There are five scenarios to choose from, even though the battle lasted for no more than a day. Three recreate particular incidents in that period, one allows you to play through something that might have happened, and one, naturally, allows you to attempt the entire confrontation. Solemn realism reaches its height in the scenario 'Night Action', which sounds almost unbearably exciting; 'because of the very poor visibility it is quite likely that there will be little or no contact or action during this scenario . . . '

Combat takes place automatically when enemy ships are within range of each other, and it is displayed visually after the player has entered movement orders. The chances of hitting the enemy are influenced by various factors, including the visibility (which can be affected by the ship having to fire into the setting or rising sun) and the gunning ability of the particular ship. Confusingly, hits on the player's ships are shown from the enemy's bridge. If visibility is poor and the ship cannot identify a target, the player is given the chance to stop the attack.

Lesser ships – the light cruisers and destroyers – are either sunk or afloat. The battlecruisers, on the other hand, go through a complex damage sequence before finally sinking. Their gun turrets can be knocked out, reducing their efficiency in combat, their maximum

FORUM

A larger selection of letters than usual this month, thanks to the extra space available in this FRONTLINE Special. Sometimes, due to the usually ungenerous page allowance accorded to FRONTLINE, the FORUM gets squeezed out altogether. Just because, one month, you don't see any letters appearing, you mustn't suppose that I don't want any! All your letters are read and filed, and you might be surprised to see that something you sent months ago unexpectedly turns up in print.

I welcome letters on all strategically-related topics. In fact, I welcome letters on any subject even vaguely related to computers or gaming . . . anything written to FRONTLINE supports strategy gaming on the Spectrum, and, with major companies like the old mainstay PSS pulling out, such support is badly needed!

THREE POINTS

Dear Philippa
I have followed FRONTLINE for two years now, and I have decided that it is time to write to you. Basically I want to cover three points: DIFFICULTY: All games are difficult when first played, but once cracked, they become easy. I believe that the thing that makes a game worth its money is the span of time between the day you buy it and the day you crack it. Sometimes 'cracking' day can be soon (*Tobruk* – four days) or it can be months (*Rebelstar*, Level 8 – four months). What I would like to see in future games are difficulty levels, or a generally harder game. After all, wargames have been going around for three to four

speed can be reduced, increasing their chance of accidently breaking away from the squadron, and general damage progresses through five stages from nil to very heavy. When a ship is damaged, the player is given the option of detaching it from the squadron. A damaged ship slows the squadron down, but getting rid of it when its gun turrets are large reduces the firepower.

The range of reality factors 'rulepinned' is very great, and I know that many people get satisfaction out of that for its own sake. While I like to see complexity in a game of this nature, it is not enough to make it enjoyable to play. I found it very difficult to get any satisfaction out of playing *Dreadnoughts at Jutland*; as a simulation it lacks atmosphere and excitement, and as a game it is not interesting.

On the other hand, I realise that some people will enjoy the historical accuracy more than I am able to, and there has certainly been a lot of thought, research and knowledge put into a game which, for an amateur production, is well presented. You will, I hope, be able to tell from my description whether this is your sort of game.

Presentation **78%**
All parts of the program run smoothly, and the documentation is unusually good for an amateur game

Graphics **60%**
The views from the bridge are reasonable, if functionally dull. The plots are difficult to decipher

Rules **87%**
Detailed, clear and ample, although there's a lack of broad background

Authenticity **88%**
Convincing

OVERALL **69%**
A working model of Jutland, which some players will find intrinsically more interesting than others

OVERLORD

Producer: **CCS**
Author: **Ken Wright**
Price: **£9.95**

This is the second game that I've reviewed in FRONTLINE which deals with the famous Normandy landings, and last year I dealt with a Commodore game in ZZAP! on exactly the same subject. It seems that the Overlord campaign, when the Allied forces swept across the north coast of France in a well planned but not often well coordinated effort to liberate Europe, captures the imagination of wargame designers. It was the largest amphibious assault in history, it was the turning-point of the war that means most to us today, and the dramatic nature of events make it a perfect template for any wargame.

The campaign had been in planning for over a year, and was launched with five amphibious forces – assigned to their own landing beaches – backed up by three airborne divisions. It was two members of that airborne division who first touched occupied soil, at sixteen minutes past midnight on 6th June 1944. Their plane landed so abruptly that they were both catapulted forward out of the cockpit. This first contact was rapidly followed by waves of troops flooding onto the beaches. The American divisions found themselves scattered and uncoordinated; unable to concentrate their attack force at any one point, they ended up fighting haphazardly wherever they met resistance. Ironically this disorganisation probably contributed to the success of the assault. The enemy was unprepared and confused, and was unable to discern any pattern in the landings simply because there wasn't one!

By contrast, the landing of the British 6th Airborne Division between the Orne and Dives rivers

▶

years, and us players must be getting better to some degree.

BIGGER: With the advent of the 128's, with the exclusion of the +3, do you think game areas could be bigger, include speech, better FX, with artificial intelligence and other game enhancing functions? Also, do you believe the 48K still has a role to play in Spectrum wargaming?

DIY: We've had *GAC*, *PAW* and the *3-D Games Maker*, do you think we'll see a wargames utility? I personally don't see why not, and I'm sure you and a great number of my fellow wargamers would agree this would certainly help boost the admittedly low volume of Spectrum releases. The only danger is that the market could be flooded with bad games, but I'm sure one or two might be good, and as I see it that's all we'd need. Also, it would help the players make their own games; to implement their own ideas, or design a game where another game fell short.

Anyway, now that's off my chest I can wish you luck in the FRONTLINE and hope you win all the coming campaigns.

Graham Briggs, Grimsby DN36 5BT

The difficulty of a wargame is one of the major considerations in its worth. The 'repeat playability' of arcade games is limited only by their ability to bore the player. But wargames, like adventures, tend to lose their charm once they've been solved. Wargames aren't quite as rigidly 'finishable' as adventures – most give you the chance to better your victory – but it's a great disappointment to achieve a 'substantial Allied victory' four hours after you loaded the game for the first time. That's one reason why variable difficulty levels are to be commended, especially if the way that victory is made more difficult is imaginative.

I would like to see bigger wargames on the Spectrum, because really, the only way that strategy games can be improved is outwards. Sadly, though, I don't think it will happen: it's a long time since I've even seen a 128 option in a game sent for review, which – when you consider that only 128 Spectrums are on sale now – is a very discouraging sign.

Now two letters on the subject of my largely favourable* Pegasus Bridge *review . . .

PI

A BRIDGE TOO FAR

Dear Philippa
I found your summing-up of *Pegasus Bridge* very informative and entertaining and I will be looking out for it in the shops (hopefully). If not, I will have to fall back on Aggie (not literally). I'll check out your rating then!

This wargame particularly interests me as I would imagine there are not many of your readers who took part in this operation and it is a very vivid memory to me.

You mention that the program has some ground troops reset in position. I imagine these consisted of an assault force of six glider-loads of 2nd Oxf & Bucks who crash-landed their gliders around Pegasus bridge at the dead of night and captured the bridge ahead of the main body of 6th Airborne Paras who were to reinforce this small group. There was a counter-attack by a small group of the enemy who came up the river Orne by boat before the paras arrived but this was beaten off by Anti-tank weapons.

I hope I haven't bored you with this but from your account, *Pegasus Bridge* does sound interesting and authentic.

I am more into adventures than wargames, but this is one I must try. Sincerely hoping I am not your oldest reader.

Mr D Drummond, Clacton-On-Sea, Essex CO16 7DG

Dear Philippa
I read your review of PSS' *Pegasus Bridge* in the Xmas copy of CRASH magazine. This game seemed the best of the bunch of Spectrum wargames that have been released recently, but after quite extensive playing I find that your review is uninformed and you probably didn't even play the game right through.

At the end of the game a scoreboard flashes on screen and gives a listing of bridges captured/held/destroyed and a final points total for each army. All this is on screen for about FIVE SECONDS! and then the screen goes blank. It is impossible to read so your efforts have been futile, because at the end of the day you don't know if you have won or lost! This is probably the games biggest fault but you failed to mention it.

Armoured and artillery units are impregnable. Even though their units are small, any amount of fire power, air strikes or naval bombardment can be unleashed on them and it still fails to even scratch their paintwork.

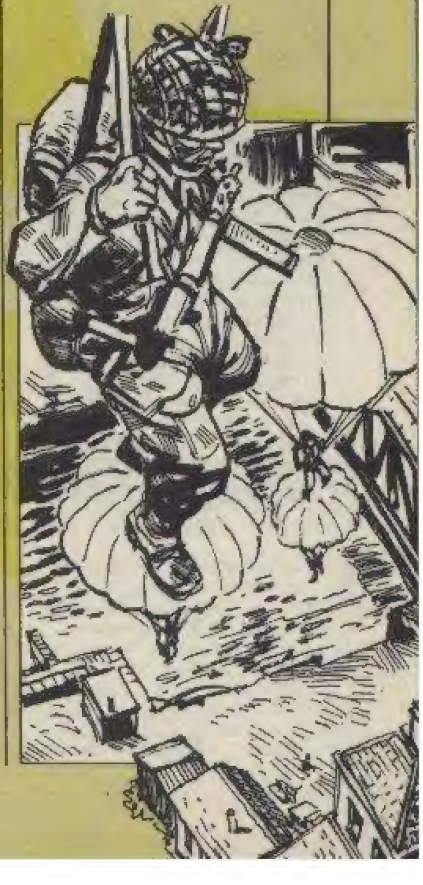
The third major fault is the non-appearance of certain airborne units. Sometimes they come into play but on other games (playing the German side against the computer) they don't.

Perhaps in future you could playtest the games a little longer as there is not a plethora of wargames released each month, and put less emphasis on packaging, historical accuracy and rulebooks. The game itself is what is important.

David Ettringham, Cleveland TS18 5PJ

For my normal methods of reviewing see the article elsewhere in this issue, but I must admit negligence of sorts over* Pegasus Bridge. *The copy which I had contained a very obvious bug which tended to crash play when – if I remember correctly – I tried to attack with more than one unit at a time. I puzzled over this for some time, and I knew that my copy of the game was faulty. I requested another. It arrived a day before the copy deadline and wouldn't load . . . so rather than miss a FRONTLINE altogether, I wrote a review on what I had seen of the game. As this didn't include completing it (the bug always stopped me), I couldn't mention – as I undoubtedly would have – the clumsy ending. It is generally my rule to play any game to the bitter end at least once.

PI



came off perfectly, and they achieved their preplanned objectives within minutes. This, of course, was the scenario concentrated upon in *Pegasus Bridge*. More ambitiously, *Overlord* attempts to recreate the entire sweep of the campaign.

Overlord comes from Ken Wright, who now has *Waterloo*, *Yankee* and *Blitzkrieg* to his credit. Whereas the first of these two games are battle simulations, both *Blitzkrieg* and *Overlord* take a long-range overview of a whole campaign, complementing each other thematically. *Blitzkrieg* was based on the first sweep of the Axis armies into Europe, and *Overlord* takes up the counter-attack.

The most fundamental question about *Overlord* is whether the scale chosen is correct for this kind of campaign. The Normandy landings were tightly-packed, individualistic events, and recreating them really requires attention to detail and a degree of precision. In *Overlord*, we have divisions represented by the usual square counters bearing slightly dubious symbols to identify them. In the context of these battles, they seem large and clumsy and are, by design, almost impossible to manipulate.

The on-screen appearance of the game is identical to that of *Blitzkrieg* and indeed the author's earlier games. A clear, though rather sparse map fills the screen without extraneous clutter, and all communication takes place in the small message strip at the bottom. One innovation is the reinforcement box: a panel which floats in the English Channel and allows the player access to the units of each of the seven armies which have not yet entered the game. The area represented is the northern coast of France, not unnaturally, but the map goes southwards for quite a bit further than I imagine it is generally possible to move your units. The whole map is seven times larger than the screen (according to the rulebook) and scrolls smoothly by means of the cursor keys.

The player has command of seven armies: five American corps, plus British and Canadian forces. The division types are divided into infantry, mechanised and armoured units, and each corps has seven units. There are also airborne divisions, which are few in number and function as normal infantry when they've made their landing.

These units are defined only by a morale rating and a percentage strength. They do not even have individual designations, though which tends to make them seem bland and somewhat anonymous. The way that the movement system works makes it impossible to place them precisely, however, so a certain interchangeability is useful.

After selecting a difficulty level from one to three (the morale of your units is affected by the choice) the game begins without further preamble. Due to memory restrictions, and the large amount of the program dedicated to driving the enemy's artificial intelligence routine, there is no choice of sides or option for a two-player game.

The turn structure, as in *Blitzkrieg* is divided into a single orders phase and a sit-back-and-watch execution phase. At the start of the game, however, all the player's units are floating in some nebulous region to the north of the map. The continent is occupied only by enemy units which, although they disappear into a fog of limited intelligence after the first turn, are clustered in full and frighteningly prolific view. The invasion must in initiated on the first turn, and to this end the first thing the player does is to 'activate' five beaches to land on from a choice of twelve. The beaches are effectively points on the northern coastline where units can be brought onto the map, and are lettered A to L. Further beaches can be activated by moving units close to them.

On the first turn only infantry units can be mobilised, and only one can land on each beach. This means that the strategic decisions possible on the first turn are limited to the choice of landing areas – not unimportant – and of the corps to be used in the first assault. On the action phase of the first turn, the chosen units are moved onto the beaches. The thing to do in the next turn is to get them off them as soon as possible, so that others can be moved in. On the first turn there is also an airborne units option, if a corps with such units has been chosen for the initial assault. The airborne unit can form a spearhead by landing up to three squares away from one of the active beaches.

The movement orders are entered in much the same way as in *Blitzkrieg*: the general line of advance of the corps is set by a central, right and left flank position; it is not possible to give orders to individual units. Combat orders are limited to a choice of three approaches: whether to attack any enemy unit that they might encounter, not to engage in combat at all, or to attack when the general thinks there is a good chance of success. Once these orders are entered for each army, the execution phase moves the units in some approximation to your intentions and then resolves combat in a leisurely and intelligible way.

In combat, mechanised and armoured units have the advantage, and units with a low morale are seriously at a disadvantage. Terrain has its effect too, though it is not possible to use terrain to the same advantage as one could in the author's smaller-scale games. In fact, the impossibility of positioning units precisely makes it difficult to care much about this aspect. The results of combat, instantaneously displayed, are somewhat monotonous: strength, or effectiveness, is chipped off units in 5% blocks. I have never seen damage greater than 20% in one combat round, although in a single combat phase a unit might suffer considerable damage from repeated attack by enemy units surrounding it.

The author lays great emphasis on the artificial intelligence driving the enemy, but the first thing this routine is called upon to simulate is confusion as the enemy dots about helplessly in response to the unexpected invasion. But they soon rally and come streaming up to the beaches in alarmingly large and solid numbers. The first stage of the game is very much about the problem of getting sufficient numbers of units onto the map before the enemy closes in and makes it difficult to move units off the beaches. Quick inland movement is essential, but going too far is dangerous because the units get trapped amongst the encroaching Germans. The ideal is to build up a solid defensive wall along the coast, with more than the initial five beaches activated and all units in play. Then the player can meet the German army on equal terms, wear it down, and start to advance.

The difficulty is that the movement system makes it hard to manipulate the units into doing anything sensible. The lack of control over movement – unique in the Spectrum wargaming world to Ken Wright's games – is interesting and unusual in its proper application, but frustrating in this scenario. It is true that most of the divisions landed in disorder, but the simulation – if it is supposed to be a simulation of that aspect – has very little reality.

There are no specific victory conditions to strive for: play is stopped if either army falls before 40% effectiveness, if Allied units reach the right hand edge of the map, or if all become deactivated. Victory for either side is decided purely on the respective strengths of each army at the time of play ceasing , which is infuriatingly artificial. It is much more satisfactory to have structured goals in this type of game, especially when it aims, as this one does, for sophistication.

Despite these negative aspects, the potential for varied development of strategy is very great and this is certainly an extremely well designed and well presented wargame. I would have no hesitation in recommending its a purchase and I'm looking forward to the next offering from the same keyboard.

Presentation **90%**
Unimpeachable

Graphics **71%**
Clear enough, but rather uninspired

Rules **85%**
The historical material in the rulebook is excellent and thorough but the instructions on gameplay are badly structured and slightly confusing

Authenticity **81%**
Some of the historical atmosphere is destroyed and abstracted by the clumsiness of the units, but despite that the general excitement is maintained

Playability **79%**
The smoothness of the orders system makes it easy to play, but the frustrating movement impedes playability to an extent

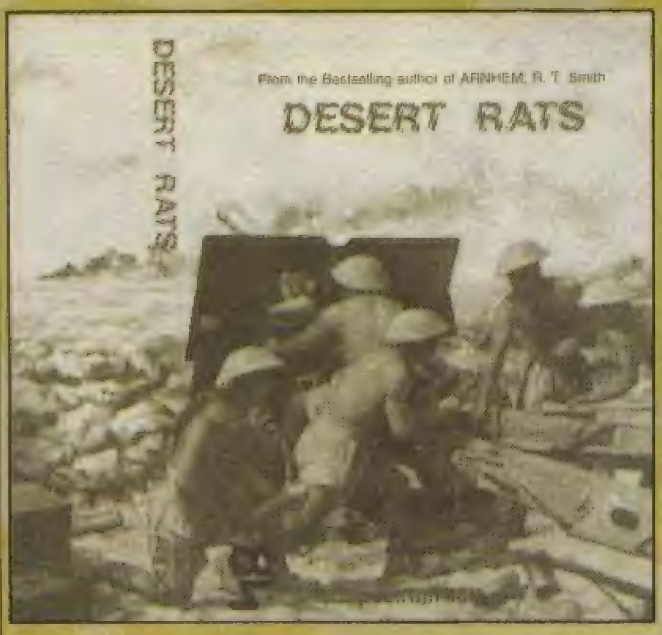
OVERALL **84%**
An excellent game with infuriating aspects – worth buying

PLAN OF ATTACK

MATTHEW STIBBE outlines a few simple guidelines to the design of a wargame from initial scenario through to the finished article

THE ADVENT of computers has meant that wargames can now be enjoyed without recourse to rule books or dice. Games like *Desert Rats* and *Annals of Rome* have sold as well as arcade games, indicating a real interest in wargames. The spirit of the dedicated wargamer still lurks inside those games, however: as easy as they are to play, somewhere inside the computer there are as many sets of rules as any table top game. As a result, designing a computer wargame is not as straightforward as it seems, but with an eye for accuracy and an idea of what makes a game entertaining, almost anyone can design a reasonable strategy game. In this article I hope to show how a such a game emerges from a basic idea, to become a fully-fledged computer wargame.

The first stage is to decide which historical period is to be simulated. This does not mean that wargames must be set in some school-book past, though: they can just as easily be set in some imaginary future, such as the games that simulate a hypothetical war in Europe; although a wargame is testing the player against a simulated real life situation, that doesn't necessarily mean it must have a definite anchor point in reality. However, as 'What would have happened if Hitler had invaded England?' is a good starting point, 'What if Hitler had had 30,000,000 tanks?' is not, mainly because the game would be unbalanced, and partly because it would not be a good test of the player's abilities, since it has departed from an accepted reality level.

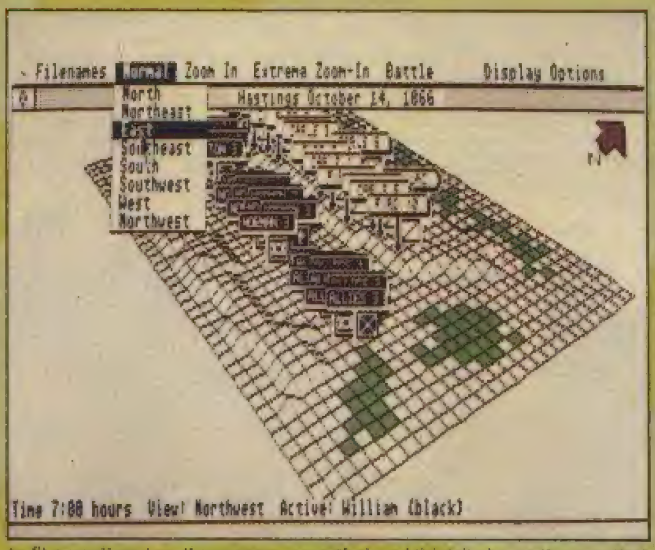


Among my favourite wargames are *Eastern Front* and *Desert Rats*, and although these are quite old now, they both provide a chance to replay history with the player in command. Perhaps the acid test of a wargame is whether the game unfolds exactly like the real historical situation if the player issues the same commands that were made at the time.

There are several ways of implementing a wargame, and the next task is to decide what scale to use. In my first game – based on the Vietnam war – the smallest units that are available to the player are battalions. These small units of about 800 men were the best compromise between reality and the limits of computer power, to work out their moves, and human memory, to remember where they all are! The war itself was a series of small scale actions, and to use larger units would have completely taken away any tactical control of the war, leaving only a strategic simulator. Even so, using battalions means that there will be about 200 units in play at any one time, and to get round the problems of human memory they can be given several orders at once to be executed sequentially.

In my latest game design of a tactical level set in modern Europe, I have opted for platoon-sized units (about 30 men, or 3 vehicles) as the smallest unit to which an order can be given. *Eastern Front* works at a divisional level, and *Desert Rats* at a more detailed brigade level.

A wargame is usually displayed on a scrolling map, which shows the terrain over which a battle is being fought. Rainbird's innovative *UMS* (Universal Military Simulator) uses a perspective map to display hills and terrain. This is excellent for small battles, but is a little limiting when trying



to fit a continent on the screen; nevertheless I think it shows the way that wargames are going. I look forward to a sort of battle simulator in which the player will get a general's eye view, instead of, or as well as a map display.

I always begin with a proposal, which is usually only a few sides. This has two purposes: firstly it helps me to think through what I would like to do with the game, and secondly it helps me sell the game by giving other people an idea of what the game is about. I then expand on the ideas that I have covered in the proposal in my design, which actually says how the things that I outlined in the game proposal work.

Along the way some things change, get added or dropped. For instance, my most recent game proposal for tactical combat suggested the use of tactical airpower. It was only when I had worked out that a turn should last only 15 minutes and therefore, a whole game no more than 3 hours (in game time), that I realised that it would take the length of an average game for the aeroplanes to arrive. This had the useful side effect that it allowed me to dispose of all the usual air defence equipment that modern armies have, so making the game less complex to play and program. On the other hand, with the Vietnam game, the use of tactical airpower evolved to the stage where the current design allows for airpower to be assigned to actual units, or specific missions (like bombing North Vietnam or the Ho Chi Minh trail), as opposed to simply being aerial artillery.

Once you have a general idea about what the game will look like, and what it will simulate, the next stage is to research the scenario. I usually get and read all the books on a subject that I can, and at the moment my shelves are filled with Vietnam books. General military reading is also useful, for instance Von Clauswitz's *On War* is a fascinating study of military strategy. General books and magazines about military affairs are also useful reading, for instance Jane's *Defence Weekly*. In addition, playing board and computer wargames gives a good idea of what can be done, and what can be improved upon.

Once I had an idea of how my Vietnam game should work, I began my research proper. I had three histories of the Vietnam war, from which I derived the strategic and political elements of the game, and a huge book called *The Vietnam Order of Battle* which cost a small fortune but which

DREADNOUGHTS at JUTLAND

(HMS Lion as she appears in the game)

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lists all the units that were present in the Vietnam war. Although this information is available in other sources it was invaluable to have all the information collated in one book. It is this sort of detailed information that is necessary when putting together a game.

Turning the available information into a working wargame requires the use of rules. These tell the computer what should happen in certain circumstances. For instance in my game, when the US raises its commitment to the war, the government's popularity falls. The difficult thing is to work out by how much. I found that the best way of doing this is to make a mini simulation. In the case of the political elements of Vietnam I used a spreadsheet, with columns for each year of the war, and rows for each of the variables. When I had entered the figures, I could test out various strategies and see if they were realistic. From this testing I modified the rules until I felt that I had a realistic working model.

For the resolution of combat I wrote a simple 'C' program to test the effect of various units' strengths in combat against each other. Another way is to make an actual board game out of the rules, and use it to playtest the game. This sort of experimentation is very important in making a good game; it is quite easy to do in BASIC, and even with only a few variables and formulae, quite complicated models can be developed, either for political simulation or for resolving combat.

Movement can be implemented in several ways, either using continuous movement, where a unit moves smoothly and continuously throughout the turn, or by using discrete steps, which correspond to grid squares on a map. The latter is closer to board wargames, and is in many ways easier to implement, because it is easier to calculate how fast a unit should move in terms of squares than in pixels. The former looks better, and is more realistic, but is harder to program.

In many games it is not how the unit moves but when. For instance, in a tactical wargame a unit might not receive its orders for several minutes, and with a scale of 15 minutes to a turn, this requires some mechanism for delaying the unit from carrying out its orders until it has 'received' them.

The most difficult area is that of artificial intelligence: it is very difficult to persuade a computer to think in terms of flanking and encirclement. Instead you need to give the computer a set of rules for moving that produce the same net effect. There are usually two levels in a computer's play, the first being strategic; the second tactical. Crudely speaking, in the strategic phase the computer decides which units are going where, and in the tactical, how they are going to get there. This is done looking several turns in advance. With many units in play it is hard to consider each possible move in the light of possible countermoves, as is done with chess, so a mechanism needs to be built in to consider when to advance and when to cut losses by withdrawing. These decisions also affect the decisions the computer makes at a lower level: for instance, when on the assault a computer might attack enemy units, and move directly toward them. But when on the defensive, units will move away from and around enemy units wherever possible.

Another possibility is to pick a scenario where the player will always behave in certain ways and so preprogram a number of counter strategies into the computer. In *Desert Rats* the computer always plays very defensively with each unit moving in support of its neighbours. This successfully represents the British manoeuvres, but under computer control the Germans lack the vigour that nearly won them the Desert War. Yet another way is to respond to the player's moves as they are made during a movement phase. This is a form of cheating, and allows the computer to respond to the player's strategy rather than predict it. In a way, a human player is handicapped because the computer can always examine the exact state of his or her forces, but the player cannot examine the computer's.

Once the game is written, it may still need some fine tuning. This is usually done by modifying the variables in a game, so that specific factors are altered in a realistic or sensible manner during play. Other areas which may need changing are the tables that work out who wins a battle, or the speeds at which different types of unit move over different types of terrain.

Often the biggest problem with wargames is deciding what to leave out. As an example, when Chris Crawford produced a version of *Eastern Front* for a larger Atari, he included a number of new options which he was unable to fit into the smaller formats.

A simulation is, of necessity, a scaled-down version of reality. A simulation deals with general trends, not specific events; in my Vietnam game I have included a variable called 'outrages' to simulate all the different things that appalled the world: strategic bombing, defoliation, atrocities and the mining of Haiphong harbour. I would have liked to include a model of North Vietnamese diplomacy and a model of the American economy in the game, as these would have made it more realistic. In the end, however, I left them out, because I did not think that they would add anything to the gameplay while simply increasing its complexity.

If you think of a wargame as a game of rules like *Monopoly*, then all that is necessary is to make those rules as realistic as playability and the constraints of your hardware will allow.

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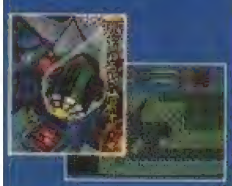

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Screen shots from various formats.

THE 1987 CRASH READERS' AWARDS

After spending many an hour sorting and compiling an absolute mountain of voting forms, CRASH proudly presents the definitive Spectrum software awards for 1987 . . .

BEST GAME
DRILLER
Incentive

HEAD OVER HEELS
Ocean
EXOLON
Hewson

With one in five of you voting for Incentive's innovative eye opener, *Driller* swept the board – but not without a challenge. The Jon Ritman/Bernie Drummond game, *Head Over Heels*, came a very close and respectable second with 16% of the vote. Raffaele Cecco's first Hewson masterpiece, the tremendous, attractive and playable *Exolon*, brought up the rear with a credible 8%.

BEST PLATFORM GAME
AUF WIEDERSEHEN MONTY
Gremlin Graphics

BUBBLE BOBBLE
Firebird
EXOLON
Hewson

The platform game seems to be a dying breed in 1988, but that isn't to say we didn't get some great ones during 1987. With a tremendous 19% Gremlin's *Auf Wiedersehen Monty* just came top. Following only 2% behind was the very colourful *Bubble Bobble* and again coming third, was *Exolon*. The same 8%, no doubt.

BEST SHOOT 'EM UP
ZYNAPS
Hewson

EXOLON
Hewson
WIZBALL
Ocean

With a combined vote of 57%, Hewson games dominated the shoot 'em up award. When it came down to pure mindless violence *Zynaps* just had to come top, with 34%. *Exolon* – always the bridesmaid never the bride – came a notable second with 23%, while Ocean's *Wizball* received 6% and third place.

BEST ARCADE ADVENTURE
HEAD OVER HEELS
Ocean

STORMBRINGER
M.A.D.
GAUNTLET
US Gold

No surprises here! Not only is it a favourite in the CRASH offices, but *Head Over Heels* also gained a 26% winning vote in this category, proving its popularity throughout the land. No-one else came even close: second place *Stormbringer* had 7% and the arcade licence, *Gauntlet*, came third.

BEST SIMULATION
GUNSHIP
Microprose

COMBAT SCHOOL
Ocean
TOP GUN
Ocean

You all had your minds made up on what was going to win the Best Simulation award when you filled in the forms way back in the Christmas Issue. Even though they've only produced two products on the Spectrum the American giants, Microprose, needed only *Gunship* to get almost half of the readership (43%) voting for them. Trailing way behind, but still interesting to note, came *Combat School* (6%) and *Top Gun* (5%), both from Ocean.

BEST SPORTS GAME
MATCH DAY II
Ocean

WORLD CLASS LEADERBOARD
US Gold
BOBSLEIGH
Digital Integration

Match Day II gained an amazing 62% of the vote in this little contest – thus giving no-one else a hope of winning. However, the golfing classic, *World Class Leaderboard*, must have appealed to all you Arnold Palmers out there, gaining 15%. After Calgary '88, *Bobsleigh* was obviously in the minds of the 5% that voted for the Digital Integration simulation.

BEST ADVENTURE
THE PAWN
Rainbird

SHADOWS OF MORDOR
Melbourne House
KILLED UNTIL DEAD
US Gold

The adventure market was very quiet in 1987 but Rainbird still had lots to shout about when they released the highly complex and intelligent game *The Pawn* – and so did 15% of you (I don't think they were ALL Rainbird employees). Melbourne House's *Shadows Of Mordor* came a very close second with 14% of the vote – sadly Melbourne House seem to have forgotten about adventure games now. US Gold popped its head in with the detective/mystery *Killed Until Dead* in third place (7%).

BEST STRATEGY GAME
VULCAN
CCS

TAI-PAN
Ocean
THE SENTINEL
Firebird Gold

I can't say that this was much of a surprise. *Vulcan* has been at Number One in the Strategy Chart almost since it was first started. And with PSS now pulling out of the market (see Frontline) CCS seems to have it sewn up. *Vulcan* got 34% of you voting for it. Interestingly, *Tai-Pan* and *The Sentinel* came second and third, with 5% and 4% respectively – even though they weren't reviewed in Frontline.

MOST IMAGINATIVE GAME
DRILLER
Incentive

THE SENTINEL
Firebird Gold
HEAD OVER HEELS
Ocean

Driller certainly seems to have caught the imagination of the CRASH readership. In a very wide-spread category the Incentive game got 19%, for its amazing Freescape technique, followed closely by Firebird's *The Sentinel* (15%), another game with impressive graphics, and *Head Over Heels* (12%).

BEST GRAPHICS
DRILLER
Incentive

HEAD OVER HEELS
Ocean
EXOLON
Hewson

Gaining more than twice the number of votes as *Head Over Heels* that unforgettable game, *Driller* (30%) again zoomed to the top. But as far as REAL artists go (Freescape is a graphics generation program) Bernie Drummond, who drew all the cute characters in Ocean's extravaganza, must still be regarded as the Number One Spectrum artist. *Exolon* – The Runner-Up of 1987 – gained a respectable 12% in third place.

BEST MUSIC
TRANTOR – THE LAST STORMTROOPER
GO!

LIGHTFORCE
FTL
AGENT X II
Mastertronic

The synthesised four-channel sounds of GO!'s *Trantor* appealed to 16% of you. The ageing *Lightforce* and *Agent X II* gained 5% and 4%.

BEST SOFTWARE HOUSE
OCEAN

HEWSON
US GOLD

If ever there was a two horse race then this was it. Ocean and Hewson were streets ahead in 1987, with CRASH readers giving them 39% and 32% respectively. Ocean can be remembered for such hits as *Top Gun*, *Wizball*, *Match Day II*, *Combat School* and *Renegade*. From Hewson we had *Exolon*, *Zynaps*, *Nebulus* and *Ranarama*. The producers of many a licensed game, US Gold gained 5% in third place.

BEST UTILITY
THE PROFESSIONAL ADVENTURE WRITER
Gilsoft

THE ARTIST II
Softek International
THE ADVANCED ART STUDIO
Rainbird

Gilsoft's popular adventure creator got 21% of you voting for it. Two art programs, *The Artist II* and *The Advanced Art Studio* came 11% and 16% behind the winner. (Work that out if you will!)

BEST PERIPHERAL
MULTIFACE
Romantic Robot

SWIFT DISK
Sixword
THE MUSIC MACHINE
RAM Electronics

Many a +3 tape loading problem were solved with the Multiface 3. 26% voted for the series of 3 products. The Swift Disk interface got 7% of you interested with a musically-minded 6% of you voting for RAM's Music Machine.

BEST PBM GAME
IT'S A CRIME
KJC Games

SHATTERED WORLD
Jade Games
MEGALOMANIA
Phoenix Games

Much has been said about the moral aspects of KJC's *It's A Crime* but it certainly created much interest amongst the PBM fraternity with 27% of the vote. The immensely popular *Shattered World* was just squeezed into second place with 19% and Brendon's favourite, *Megalomania* from Phoenix Games, in third place with 10%.

MOST EFFECTIVE GAME ADVERTISEMENT
GAME OVER
Imagine

BARBARIAN
Palace
LIGHTFORCE
FTL

So the scantily clad young lady from Imagine and Maria Whittaker got you running to the shops to relieve your pockets of money! *Game Over* and *Barbarian* gained 12% and 10% of the vote. Lightforce again popped its head up with 7% in third.

BEST GAME PACKAGING
DRILLER
Incentive

GUNSHIP
Microprose
STARGLIDER Rainbird

Big boxes were certainly the order of the day for 1987. *Driller*, which got 21% of the vote, came complete with a novella and map model. *Gunship* (13%), in true American style, came with a great big mission manual and keyboard overlay. And 10% of you didn't mind lashing out 15 pounds for the lavishly packaged *Starglider* from Rainbird.

BEST GAME INLAY
GAME OVER
Imagine

LIGHTFORCE
FTL
RENEGADE
Imagine

My goodness that Imagine girl doesn't half get around a bit. As well as gaining an award for affecting most of you with an advert *Game Over* also had the Best Game Inlay. The, now defunct, software company Faster Than Light featured highly with *Lightforce*, as did Imagine's *Renegade* – both with 6% apiece.

WORST GAME
EASTENDERS
Tynesoft

MASTERS OF THE UNIVERSE
US Gold
SUPER SOCCER
Ocean

It seems ironic that one of the few games that the CRASH team could not get their sweaty palms on should come top in this hated category – sorry we couldn't warn you. There were many bad games about, though – *Eastenders* only got 8%. US Gold's *Masters Of The Universe* gained, or rather attracted, 6%. The hardly *Super Soccer* got a meagre 2%.

MOST OVERHYPED GAME
THE LIVING DAYLIGHTS
Domark
GAME OVER
Imagine
DRILLER
Incentive

Obviously, *Game Over* was an amazing disappointment to you all – but Imagine did a great job in promoting it. As did Domark with *The Living Daylights* – they both gained 10% of the vote. Was *Driller* not the amazing 'new dimension' it was cracked up to be? It seems not. 9% of you felt that you can go so far with promoting a new idea.

EASIEST GAME
FEUD
Bulldog

RENEGADE
Ocean
CHRONOS Mastertronic
BARBARIAN
Palace

Too easy, said 15% of the readership. Perhaps you'd all been using Nick Roberts's Playing Tips on *Feud*! *Renegade*, with 13%, followed closely and leading *Chronos* with 8%, (I hope you didn't use the mega laser) and Barbarian (also with 8%).

MOST CHALLENGING GAME
HEAD OVER HEELS
Ocean

THE SENTINEL
Firebird Gold
RENEGADE
Imagine
LIGHTFORCE
FTL
WIZBALL
Ocean

This is the programmers' favourite category, for it is only now that they know for sure whether they got a game's playability 'just right'. *Head Over Heels* gets a second award with 18%, *The Sentinel* follows on its heels with 17%, and then all with 8% come *Renegade*, *Lightforce* and *Wizball*.

MOST ACCURATE CRASH REVIEW
DRILLER
Incentive

HEAD OVER HEELS
Ocean
COMBAT SCHOOL
Ocean

Yes, we thought so too!

LEAST ACCURATE CRASH REVIEW
ARKANOID
Imagine

ACADEMY
CRL
RENEGADE
Imagine

Umm . . . sorry about that.

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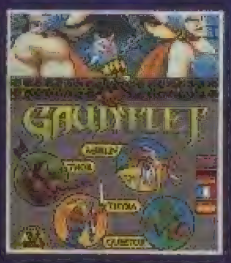

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Nick Roberts'

PLAYING TIPS

There's some really excellent software around these days – just take a look at Cybernoid, **the fantastic new Hewson game (more about that later). This month I've got some excellent maps for** Dark Sceptre **and** Platoon, **and there are also the complete solutions to** Bravestarr **and** Terramex.
The prizes this month are back to £30, but that's still a lot of software to play around with. The lucky winner of all that software is Jason Richardson from Wincanton **for his** Bravestarr **tips. Well done lad. That's £30 worth of software on it's way to you . . .**

PAVEMENT ?

We can't have American words in this column! But it's too late to change the name of Infogrames's excellently-drawn Sidewalk **now, because** Stephen Pettitt **of Maidstone has already sent these tips.**

1 Find the hippie, ask where to get tickets
2 Go to the record shop (with two arches) and ask for three tickets
3 Find Whacka, ask about the fiver
4 Find Snake, say 'The man with the flail sent me'
5 Go to the record shop, say 'You really haven't any more tickets?'
6 Find the hippie, say 'What do you know about a stolen bike?'
7 Go to Germaine's house, ask the same question
8 Go to the dead-end street, get the engine
9 Beat up all the gang members to collect pieces of the bike
10 Find the punk girl and ask 'What do you have for sale?'
11 As you walk past the alleys, collect more pieces
12 When you've beaten up a gang member, always go to the bar and have a drink
13 Once you have every piece of the bike and two Band Aid tickets, go to the phone box and tell your girlfriend that you will be with her as soon as possible

GARY LINEKER'S SUPER STAR SOCCER

Dribble, dribble, pass, GOAL, last one back over the halfway line, ten press-ups (well, that's what my games teacher says). Matthew Hickling **of Bradford has some tips on** Gary Lineker's Footy Game.

First select your options:
Speed= 10 x normal
Centre = joystick
Coach = computer

When you start playing keep right pressed on the joystick: when you've taken the centre, dodge the opposition's players, and when you're near the goal make as if you're going down.

The goalie will dive that way and then walk into the goal with the football.

Before the opposition takes the centre, keep right pressed, and you'll take the ball off the centre forward.

Do the same as before, tackle the opposition and make the goalie dive the other way.

Continue this throughout the match, but remember to go the other way after half-time!

ATF TACTICS

Digital Integration's ATF, **reviewed last issue, was liked all round even though it missed getting a Smash. And now you can fly further with your Advanced Tactical Fighter, using these tips from** Luther Arkwright **of North Kelsey.**

The map will always show all friendly and enemy forces, even though only one or two units are spotted by intelligence so they can be attacked. Only sea forces of either side are at sea, so a cluster of enemy ships can be easily distinguished.

Since any enemy unit within 80km of the ATF will be spotted, a tight cluster of enemy units is a good target.

Weaponry: 5 units of gun ammunition is enough for almost any mission. It is possible to carry an extra Maverick instead, but it isn't worth the points lost for killing interceptors. The ASRAAM is of little use, and steering it also turns the ATF.

It's usually better to carry a full fuel load than to carry a full load of Maverick missiles. If a couple of enemy bases are near your starting point, the trade-off is worth it. Usually range is an advantage.

Speed: It's very rare for an ATF at full speed to hit the ground in Terrain Following mode. And at that speed most interceptions are from the front. It's worth slowing down for the actual attack on the target – it takes a lot of hits to destroy some targets, such as bases.

The Maverick has a range of slightly over 100km. The target has to be in front of the ATF, and the closer the target bearing is to the ATF's heading the better.

Land and sea forces are usually destroyed by one good shot; but it usually takes two or three hits to destroy factories and communication bases. Bases are very tough targets.

Turning back to continue an attack is a slow job, so it's worth taking a slow approach to allow as many shots as possible.

Interceptors are a nuisance. If the terrain grid is switched off a head-on attack is a little easier to spot, but a brief burst of cannon fire and a slight turn to the left or right will usually deal with the interceptor and avoid any shots it's fired.

There are two ways of surviving an attack from the rear. The simplest is to turn away from the interceptor. If it appears on the left turn to the right. The pattern of shots will then just keep missing.

There is a distinctive pattern just before the interceptor breaks off, and as you turn back toward your original course you should get a good shot at it.

A more difficult tactic is to break across the interceptor's line of fire and then keep turning left and right till it breaks off, giving you a very close shot. This method keeps you closer to your original course but can get you shot down.

The automatic landing system has a range of about 70km. If you are not actually being attacked by interceptors or SAMs you can stop worrying about flying.

There is one hazard: badly-damaged aircraft cannot maintain height and speed when the undercarriage is lowered, so don't do it till the last moment.

The end: *ATF* ends when one side or another runs out of land and sea forces, or when you've lost three ATFs.

Two easy mistakes to make are not lowering the undercarriage on landing, and not noticing that there is a SAM warning.

For maximum points, save the last military unit till you've hit everything else, though be careful not to lose all your own units.

Enemy interceptors do not appear to need a base to fly from, but there will not be many flying.

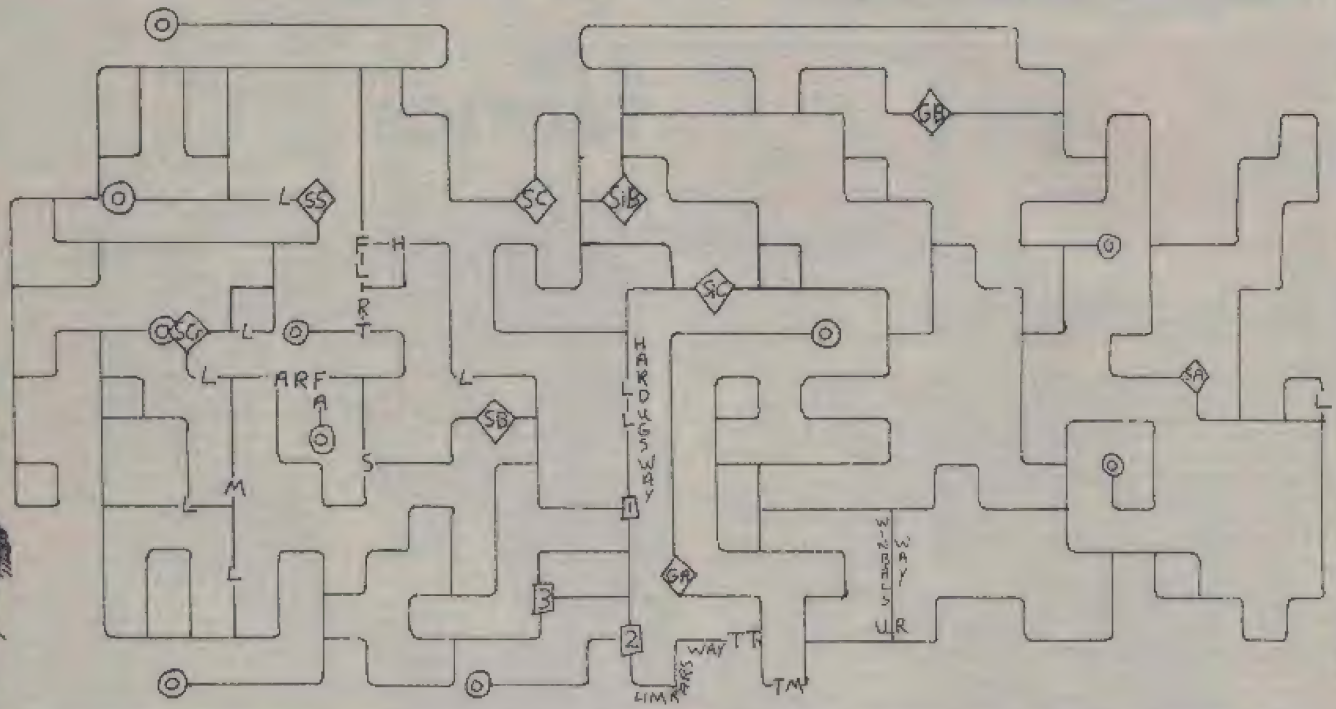
SHORT INVADERS

Remember how John Morris **found a hidden fruit-machine game in Ocean's** Short Circuit **(revealed in Issue 49)?**

Well, now Stephen Pettitt **of Maidstone has discovered more secret software. Follow these directions to get a** Space Invaders **game in** Short Circuit.

From the fruit machine: r, link, load 'DROP', drop blue passcard, l, play the fruit machine till you've collected two 10p pieces, l, d, l, l, u, u, search desk, get red passcard, d, d, r, u, u, l, l, use red passcard on locked door, r, d, d, r, u, use 10p on desk

Dark Sceptre



KEY: STARTING POINTS	
T - THANE	H - HERALD
A - ASSASSINS	S - SAVAGE
F - FOOLS	M - MYSTIC
R - REAPERS	L - THRALLS

JUNCTIONS	THE ENEMY
1 - WINSAN'S FORK	TT - TYRIAN'S THANE
2 - FUNSAN'S FORK	TM - TYRIAN'S MYSTIC
3 - FOLIG'S FORK	UR - UMBRARG'S REAPER

OBJECTS.

SS - SILVER SWORD	SiC - SILVER CUP
SCr - SHINING CRYSTAL	GA - GOLDEN AMULET
SB - SHINING BOOK	GB - GOLDEN BOOK
SC - SHINING CUP	SA - SHINING AMULET
SiB - SILVER BOOK	

EMBELLISHED BY MARKIE. HELPFUL HINTS BY GOOD OL' IAN (CHUBBER) CHUBB! (BLESS 'IM!)

It's nice to see cartographers taking notice of the art department's pleas – all the maps this issue were sent in drawn in black and white, just right. This one, for Firebird's Dark Sceptre, comes from S Wallis of Aberystwyth (Mark Caswell's home town) and wins him £30 worth of software.

CHEAT MODE MOTEL

Cheat Mode Motel's gone up-market with a new paint job – and it seems to have attracted more guests. This month we've got cheats for Nebulus, Combat School, Amaurote and Garfield, all from the Heavy Mob (Andrew Cadley, Danny Fox and Alex Wright).

They must be pretty heavy to fill up four suites . . . *&$!@ package tours!

GARFIELD

On the title screen, hold down SYMBOL SHIFT and all the letters in the word GARFIELD. Then hold down CAPS SHIFT and any combination of keys 1-5 to be transported to a different screen. (You can work out by experiment which combination will take you where.)

COMBAT SCHOOL

Move your aiming cursor so that half of it is actually on the target. When you fire, your number of hits will go up but the target will stay intact. Using this cheat you can get at least ten hits per target!

NEBULUS

Hold down N, E, B and CAPS SHIFT all at the same time. You now have infinite lives. Press CAPS SHIFT and the number of the level you want to get to.

AMAUROTE

When you start the game, move your droid into the Viminal district and press FIRE. Get killed and start a new game. You will notice that Viminal is shaded over; from now on, in every go you have Viminal will be automatically completed.

TAKING THE TERROR OUT OF *TERRAMEX*

Jason Pask **of Lancashire sent in this solution to Quicksilva's** Terramex

Get Hoover, u, put Hoover in inventory, l, get medium-sized gunpowder barrel, d, r, select Hoover, u, get expanding bridge, r, get manifesto, r, get silver lining, r, get unicycle, r.

Get umbrella, l, l, select umbrella, d, get flute, select flute, r, r, get ball, jump down well, l, l, get flashgun, r, r, r, select acme expanding bridge, r, select flute, r, r, jump on spring, select flute, jump to thing over hole, get bellows, get spurs, go down rope, l, l, select flute, l.

Select acme expanding bridge, l, u, r, r, r, select bellows, enter balloon, u, pull left, put bellows in inventory, r, get antiradiation pills, select umbrella, float down, float down, r, get large gunpowder barrel, select medium gunpowder barrel, enter cannon, select umbrella, float down, l.

Now see the note

In The Formula Room at the end of this solution; then r, r, get beer barrel, r, r, get energy crystal, l, go down on lift, l, keep jumping left on bridge, l, l, get battery, l, jump on trampoline, get switch, l, select umbrella, d, l, get coat hanger, l, select energy crystal, put crystal on plate, jump into teleport, select pills, l, get pile, select pills, r, r, select switch, jump up at switch plate, r.

Wait for bucket to take you to the other side, r, r, r, get button, l, l, jump at switch, l, wait for bucket to take you to the other side, l, l, select pills, jump into teleport, l, down on lift, down on lift, down on lift, select silver line, walk into anvil, r (bottom way), r.

Get cup of tea, l, l, r (top way), u, r, select silver cross, r, select formula, r, give the professor these things in order: formula, coat hanger, battery, atomic pile, button, cup of tea.

AND THAT'S IT!

IN THE FORMULA ROOM

In the formula room, each character has a different way of receiving the formula

Fortisque-Smith: select cricket ball and walk left

Big John Caine: select spurs and walk left

Herr Krusche: select beer barrel and walk left

Wu Pong: select flashgun and walk left

Henry Beaucoup: select unicycle and walk left

ONE NEBUL AND YOU'RE NOBBLED!

Following on from Issue 49's tips for Hewson's Nebulus, **here are levels 3 to 5 from** Steven and Gregory Brock **of Mitcham in Surrey.**

Next month: levels 6 to 8.

LEVEL 3 THE TRAP OF TRICKS

Walk left around the tower and shoot the bouncing ball. Go in the door and get onto the lift. Go up and walk right. Wait for the spinning nasty and let it knock you onto the level below. Shoot the bouncing ball and keep walking right till the end platform disappears. Go on the lift and go up.

Walk left and wait at the door. When the spinning nasty comes near you, go through the door; you should fall down on the other side. Go up on the lift, then walk left under the aliens and go up on the lift, if nothing is coming. Fall left and wait for the alien to move right and pass above you. Now walk left.

Shoot the blocks, then walk left and fall down onto the lift. Go up and through the tunnel, then immediately walk left and go through the door. Walk left and get on the lift. Go up and go through the door to finish the level.

LEVEL 4 THE SLIPPERY SLIDE

Walk right, up the steps, and jump the aliens when they are down. Go on the lift and wait for the spinning alien to appear. When he does, go up and shoot the block on the right. Walk left and shoot one of the blocks; then allow yourself to be pushed back by the slippery platform and shoot the other block. (Don't press FIRE while you're walking – it makes you jump!)

Walk left and quickly climb onto the lift. Go up and enter the tunnel when the spinning alien gets close. Walk left, and jump the middle platform or it will disappear. Walk left and go up on the lift. Walk under the aliens on the other side and shoot the block.

Now go through the tunnel. Turn right and shoot the block. Go through the tunnel on the left and shoot the bouncing ball. Go left and shoot the other block. Go back through the tunnel and go up the steps. Fall onto the lift and go up. Shoot the bouncing ball to the right and walk onto the lift.

When the alien goes to the left of the platform above, go up on the lift. Wait till the alien goes left again, then fall down onto the platform below and jump the gap to the right. (This might be a bit hard!)

Go through the tunnel and climb the steps on the left. Wait for the left-hand alien to start moving up just after the nearest alien moves up, and then climb the steps till you get to a flat bit where you have to jump the middle platform because it disappears.

Climb the step and shoot the bouncing ball. Walk onto the lift and go up. Walk right and fall down when the bubbles aren't near you. Shoot the two bouncing balls and walk right. When you see six platforms piled up, jump them and walk right till you come to the end of the platform.

Wait till the spinning alien comes and let him knock you off onto the platform below. Walk right off the platform and go up on the lift. Walk left and into the tunnel to complete level 4.

LEVEL 5 THE BROKEN PATH

Go onto the lift to the right and go up. Walk right and stop just before the alien. When it goes up you must run underneath it and jump over the next platform, because it disappears. Shoot the flashing block on the right and fall down onto the lift. Go up, go up the steps and go into the tunnel. Wait till the eye is above you, then climb the steps and go up on the lift.

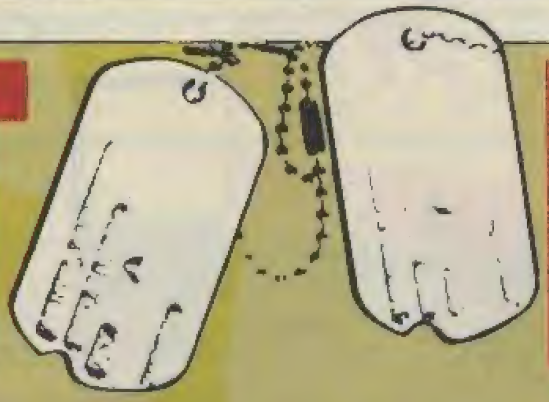
Jump left and wait for the eye to go over your head. Jump again and fall down the next gap; the platform should disappear. Shoot the flashing blocks on your left and go up on the lift. You should get knocked down by a platform.

Try getting back to the point where you shot the block. This time you have to fall onto the left-hand platform, and it should disappear. Go up on the lift. Walk left and jump the gaps. Jump the first eye as it moves down, then shoot the left. Jump right, back over the eye, then fall right, onto the lift. Go up, jump left when the lift stops and walk under the eye. Fall onto the lift and go up.

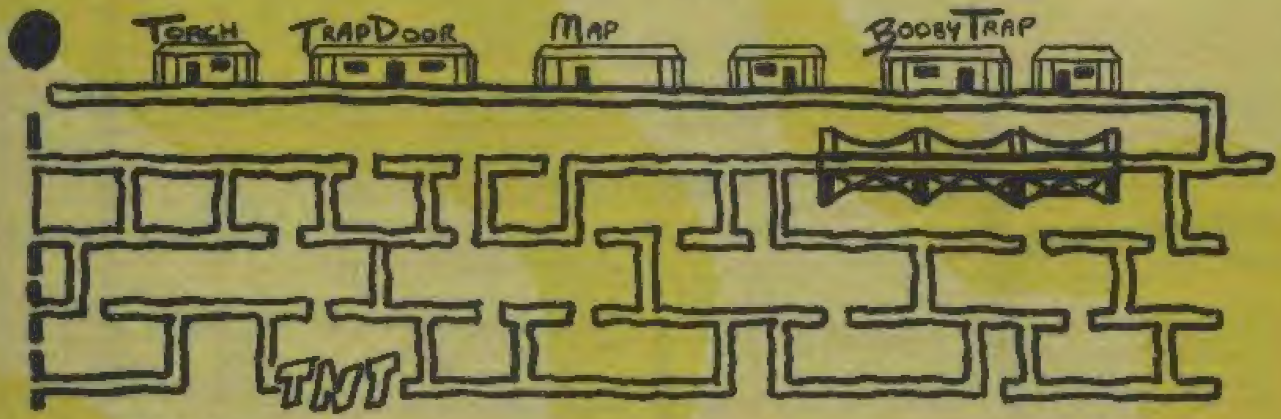
Walk left and wait for the spinning alien to knock you onto the platform below. Climb the steps when the eye goes away, then fall left. Walk under the two eyes and walk onto the lift. Go up and, if you've timed it right, a spinning alien will arrive. Go in when it comes close.

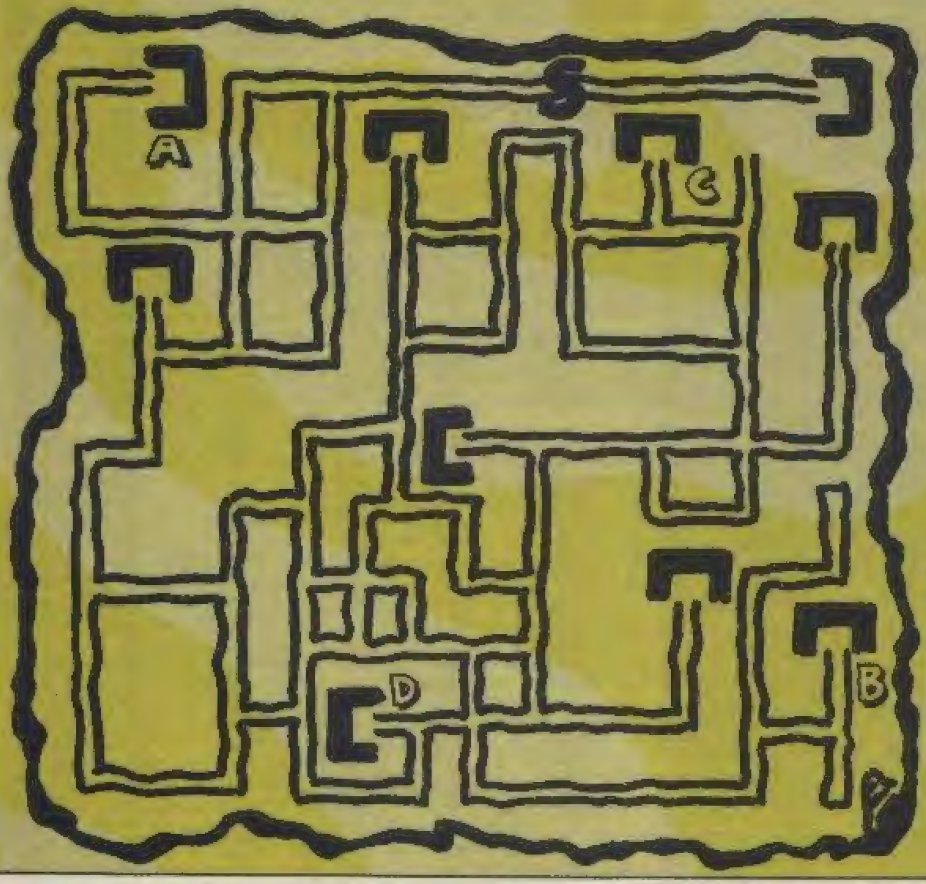
Climb the steps to the right, dodging the eye, and go through the tunnel. Climb right and watch out for the eye. Wait for the alien to go left and follow it, then go up on the lift. Walk left and shoot the two bouncing balls before walking under both aliens. Carry on walking left, go up on the lift, and go through the tunnel on the left. You've now completed level 5.

PLATOON



Last month there was a level 1 map for Ocean's Platoon, and now Stav from Sunderland has sent in these excellently-drawn maps for levels 2 and 3. Well done, Stav, these are just what the art department wants maps to look like!





KEY

A - ENEMY SECRET DOCUMENTS
FLARES

B - EXIT

C - COMPASS SECRET DOCUMENTS

D - FLARES

U.C.M. HERE FIRST!

They're falling over themselves in the scramble to bring you Playing Tips! Here's Dave Thompson, **programmer of M.A.D.'s** U.C.M. – Ultimate Combat Mission, **with the official hints for his new game.**

The first problem which you may encounter is the **three-man attack**. Start off by killing the soldier on the far right-hand side, come to the side of the screen, walk forwards till you're level with the other two, and then turn sideward and blast them to pieces.

When you're approaching the two **snipers** perched on the end of the platform, make sure you're at the right-hand side of the screen.

If a **bazooka man** appears when there's no chance of getting to him, keep on walking forwards. This will force the man into the explosion leaving you the bazooka.

At the beginning of **level two**, all you have to do is jump across the wire mesh instead of following the pathway. On the second section walk as close to the edge of the mesh as possible.

One major tip: walk up to the **snipers** off-centre to the right. By doing this you can kill them, but they miss you.

To go along with Dave's tips there's a genuine Beasty Hack **– I don't know where it came from, but I'm sure the sender will know.**

```
1   REM ULTIMATE COMBAT MISSION
7   REM A BEASTY HACK 1987
15  PAPER 0: INK 0: BORDER 0: CLEAR 24575
20  LOAD ""SCREEN$
30  PAPER 8: INK 8: BRIGHT 8: OVER 1: PRINT
    AT 0,0:: LOAD ""CODE
40  POKE 36337,0: POKE 43734,0
50  RANDOMIZE USR 44744
```

HIGH NOON IN BRAVESTARR

Tex Hex has met his match – with a bit of help from Jason Richardson **of Wincanton you should be able to defeat the baddie in GO!'s new space-cowboy shoot-'em-up,** Bravestarr.

Now this town ain't big enough for me and £30 worth of software – so it's off to Jason, who completed the game within half an hour of buying it, for these tips.

First move left till you find the flying saddle; mount this by pulling down, and fly to the mountain which is at the moment the only other thing on the map, except for the town. Enter the cave and examine it. Leave and fly to the mine entrance which has now appeared on the map, enter and examine it, release the townspeople and talk to them, leave.

Fly back to town and enter the Exchange; talk and exchange kerium for money. Go to the Bar and talk; you will be asked if you are willing to pay for information, and you must answer 'yes'. Remount the saddle and fly to the new town which has now appeared. Keep walking right and you will, at the end, be attacked by a different-looking man. This is Tex Hex *(booooo!)*.

Kneel down and continually fire till he disappears – I find this the best method.

Fly back to the original town and enter the jail; examine and release Tex Hex. Now fly to the Hexagon, the final place on the map, and walk right till you find the flying head. Kneel down and fire, dodging and occasionally jumping, till the head is destroyed. Then you've completed the game.

ON THE THUNDERCATS TRAIL

It's about time Playing Tips printed a POKE and a few tips for Elite's Thundercats. **You see, Skippy can't complete it without a POKE – this might stop some of his little tantrums and leave him time to get on with On The Screen!**

The POKE is from The Tefal Men; **the tips are from** Andrew Read **of Ipswich and** Mike 'Skippy' Dunn **of Ludlow!**

```
10  REM THUNDERCATS
20  REM (C) THE TEFAL MAN 87
30  REM (MEL+STE)
40  REM INFINITE LIVES
60  CLEAR 65535
70  PRINT AT 10,10;"START TAPE"
80  LOAD "" CODE
90  POKE 62051,201
100 RANDOMIZE USR 62040
110 POKE 32876,0
120 POKE 32877,250
130 FOR F=64000 TO 64013
140 READ A: POKE F,A: NEXT F
150 DATA 49,0,0,205,86,5,62,90,50,44,114,
    195,102,242
160 RANDOMIZE USR 32817
```

On level 3, the search for Tygra, don't go too far left but stay near the start. Kill all the baddies and keep moving left for a few seconds without jumping over anything except the armed baddies, then go right in the same way.

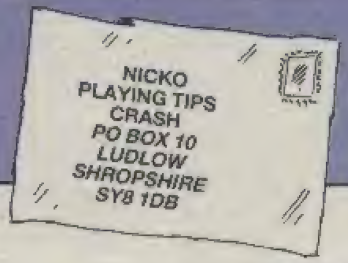
Every now and then a white shape appears. Kill it and a bonus appears in square form.

Some extra lives are hidden in the white shapes, too, so if you are down on lives collect them.

After a few minutes you may see the sword, but don't collect it or you'll lose the fireball.

There hasn't been much response to last months competition to produce a map of all the levels of Gremlin's Northstar **– so instead, just try to do as many levels as you can.**

This month I want you to map as many levels of Cybernoid **as possible. The closing date is May 3rd and the best one will receive £30 worth of software and a Hewson sweatshirt. Four runners-up will also receive a sweatshirt. Send in your entries, along with any other POKEs, tips and maps to the usual address . . .**



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SIGNED

WIN A DAY OUT AT THE LANDROVER JUNGLE TRACK

COURTESY OF ELITE

CRASH COMPETITION

To celebrate the release of their latest arcade conversion, *Ikari Warriors*, Elite have decided to offer a trio of fabulous first prizes in this great competition. On offer to three fortunate readers is a superb day out at Land Rover for some pulse-pounding driving action across their hazardous 'jungle track' terrain, plus a copy of the arcade conversion and a T-shirt! Thirty runners-up will each receive a copy of the game and a special T-shirt.

Are you sitting comfortably? Then all you have to do is this: we want you to design a multi-terrain vehicle. It can be something inspired by contemporary machines or some fantastic creation embellished with a wealth of customisations suitable for alien landscapes. Whichever you choose, it'll need to be practical enough to tackle the wide scope of earthly and otherworldly territories it might encounter. There's only one condition of entry: you must be *at least 14 years of age* by the time the great day out arrives (for insurance purposes!).

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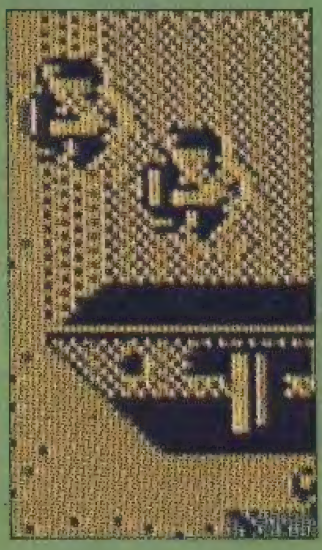
LUDLOW, SHROPSHIRE, SY8 1DB.

to arrive no later than May 9th, 1988.

As ever, our expert panel of judges will decide the winners on merit of design rather than simply on artistic talent – remember, it's the thought that counts!



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TECH NICHE

MIDI WIFERY

JON BATES expounds on the MIDI implementation charts, the maternal side of the family, and recommends a little bedtime reading

THE owner's manual of the synth of your choice for guidance about the MIDI codes? Ho, Ho, Ho. I expect Sinclair had a few more good jokes up their sleeves, since to most people these codes are about as clear as swampwater. Well never mind; I'll try to be as accurate and useful as possible.

Gather round all synth and interface owners and see what them charts mean . . . Fortunately, all MIDI implementation charts follow the same format and should even be the same size which makes comparisons between different models quite easy. By flipping through the chart you should have a fairly good idea of what your synth/module/drum machine is capable of receiving and transmitting. Having got thus far there may well be other charts in the manual or obtainable from the makers which will enlighten the darker corners of the protocol, but more of that later. Let's look at a basic chart and see what it all means. The following is a chart from my multi-keyboard called an HS6 which I have found to be a wonderful mother to me – mother keyboard that is.

Electone HS Series

MIDI Implementation Chart

Date: 2-1-1987
Version: 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	UK
		2	2	LK
		3	3	PK
			15	Keyboard Percussion
		16	16	CONTROL
	Changes	4		UK
		5		LK
			4	LEAD
			5	Arpeggio Chord
Mode	Default	Mode 3	Mode 3	
	Messages	x	x	
	Altered	**********	x	
Note Number		48-96	36-96	UK
		36-84	36-96	LK
		36-55	36-96	PK
		x	36-96	LEAD
		x	36-96	Arpeggio Chord
		x	36-96	Keyboard Percussion
	True Voice	**********	36-96	UK, LK, PK
Velocity	Note ON	9nH v=1-127	9nH v=1-127	
	Note OFF	9nH v=0	9nH v=0, 8nH	
After Touch	Keys	x	x	
	Ch's			
Pitch Bender			0-12 semi	7 bit resolution
Control Change		1		Modulation wheel (MS bit)
		4		2nd Expression pedal (MS bit)
		11		Expression pedal ***
		64		Sustain
Program Change		0-15:0-7:+ 32-50, 64-82	0-15:0-7:+ 32-50, 64-82	Registration Memory
	True #	**********	0-15:0-7:+ 32-50, 64-82	Registration Menu
System Exclusive			**	**
System Common	Song Pos	x	x	
	Song Sel	x	x	
	Tune	x	x	
System Real Time	Clock			***
	Commands			(FAH, FCH)
Aux Messages	Local ON/OFF	x	x	
	All Notes OFF	x	x	
	Active Sense	x		
	Reset	x	o	

Notes:
* 0-15 = HS-8, 0-7 = HS-7/6/5/4
** Refer to Exclusive message list
*** Recognized only when External mode

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO o: YES
Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO x: NO

BASIC CHANNEL: The instruments transmit on channels 1,2 and 3. The remarks refer to Upper Keyboard, Lower Keyboard, and Pedal Keyboard. For many synths this section will have channels 1 to 16 for both transmitted and received with the remarks 'memorized'. This means that it can receive and transmit on any channel from 1 to 16 and that it memorises the last channels it was set to. Continuing, the HS will recognise channel 15 but only play its percussion on it. By way of explanation here, the instrument has a set of sampled, velocity-sensing drums but it will only recognise input patterns; it will not send note on/off information regarding the percussion out to another drum machine.

Channel 16 is the control channel. Its function is to send and receive control messages – nothing else. 'Changes' refers to a function available on the instrument which alters the transmission channels and separates some of the tone generation areas of the instrument so that it can transmit on 4 and 5. When it receives on 4 and 5 two new areas are opened up to individual MIDI control, these being the Arpeggio Chord and Lead (the latter is a monophonic section). Thus the HS6 can be seen as five FM tone modules plus a sampled drum section and a separate channel for control messages.

MODE: the HS is only capable of MIDI mode 3, the most usual of modes. A quick glance at the guide situated at the bottom of the chart shows us that this mode is polyphonic. As this is the only mode the instrument will respond to, 'Messages' are defunct, indicated by an 'x'; 'Altered' is also a redundant statement. This would be the mode an instrument would enter when it receives a request for an unavailable mode but as this instruments mode is fixed, it won't budge from mode 3.

NOTE NUMBER. This lists the transmitted and received pitch range of the instrument – in this case for each keyboard area. As is often the case it will transmit less notes than it is capable of receiving. When given a note number outside of their range, many synthesisers will transpose it to a number inside the range producing a sort of wrap-round effect; this is often referred to in the remarks.

'True Voice' is the true range of the instruments voice chips. MIDI protocol allows a range from 0 to 127 for note numbers, middle 'C' being 64.

VELOCITY: Shows that this instrument can send and receive note velocity information over the full MIDI velocity range of 1 to 127. 0 is in effect a note-off command as seen by the next line in the chart. The Hex code 9n is the prefixed channel (n) number plus the code to indicate that velocity information is about to follow.

AFTER TOUCH. In other words the pressure applied to a note after its initial depression. If the chart had said 'yes' to 'keys' it would have meant that it could discern aftertouch for individual notes – this is not often found. The HS responds to the more usual 'Channel Aftertouch': any single note that has pressure applied to it will cause the same effect to occur on all notes transmitted at that moment on that channel.

PITCH BENDER: it can receive and send pitch bend information. The 0 to 12 semi and 7-bit resolution means that it requires 7 bits of information for each of its 16,383 miniscule graduations. The HS will effectively bend up or down to an interval of 12 semi-tones or half an octave. This may be a trifle confusing but any alteration to pitch band range is done by the setting for that voice; to get two synths to pitch bend in unison requires that both pitch bend parameters are set the same.

CONTROL CHANGE: A list of the peripherals that can receive and transmit control information, like modulation or volume (expression pedal in this case). Volume has only recently been used as a control change whereas sustain is quite common.

Foot pedal and breath controls belong to this section as well; the numbers in the first column refer to the control number for each function as per MIDI protocol.

PROGRAM CHANGE: These are the numbers that change the voices on one synth in parallel to another, again the true number tell us the actual range of voices. Here we have a slightly unusual set of

program numbers as the program map on the HS is spread between user and factory presets. Most synths now have an addition to this section where the program numbers can be renumbered internally. To blend the voices of two synths together does not then require frantic re-organization of the memory banks but a translation of the program numbers to ones that will suit.

SYSTEM EXCLUSIVE: The interesting part. This is the section of MIDI code that allows manufacturers to set up their own codes; it is not enough to enter the system's exclusive code on its own. Most manufacturers require not only their own ID but usually at least one or two sub-status numbers. It is here that voice dumps take place, drum patterns are dumped, etc, etc. All aspects that are particular to that device and that manufacturer are transmitted on the exclusive code. At this point you would need to refer to an exclusive message code list to access different areas and it often requires several commands to alter specific peripherals.

SYSTEM COMMON: Information common throughout all MIDI systems and not exclusive to one manufacturer: 'Song Pos' and 'Song Set' are usually found on sequencers or drum machines. It means that if you were to start recording half way through a complex piece the drum machine will pick up its chain of patterns at the correct point and you don't have to start from the beginning every time to get the sequence of events correct.

'Song' will ask a drum machine or sequencer to load a specific song pattern from its memory, responding to a number from 1 to 127. 'Tune' is not often used but it tells every instrument in the chain to make sure it is in tune.

SYSTEMS REAL TIME: These are all short and simple. The clock is a regular pulse that is inserted in all other commands and it ensures that all devices like drum machines and sequencers keep in perfect synchronization. The commands are usually 'start', 'stop' and 'continue', which again are self-explanatory.

AUX MESSAGES: 'Local on/off' tunes the keyboard for a synth off or on, derived from the idea that they keyboard is the local controller as opposed to a remote one.

'All notes off' is usually sent at appropriate points in transmission by sequencers to ensure that there are no notes left hanging.

'Active Sense' is a failsafe against instruments becoming unplugged accidentally. If an instrument does not receive any message within 300 milliseconds it stops playing. This will avoid horrendous noises in large set-ups and provides a neat way of circuit testing in any set-up.

'Reset' does just what it says: it returns an instrument to a born-again state complete with the factory set voices.

So there we are chaps: instant erudition. If you wish to follow the subject up there are quite a few books out now on the subject varying in price and complexity, but you might like to try:

MIDI for Musicians: (£9.95) by Craig Anderton. Published by Music Sales.
Understanding MIDI: (£4.95) Published by Music Sales.
Music Through MIDI: (£17.95) by Michael Boom. Published by Microsoft.
The MIDI Resource Book: (£9.95) by Steve de Furia. Published by IMP.

Full reviews of these publications will pop up in later issues. In the meantime I have a stack of letters and queries to get through and the next issue will see the results of a little midnight oil-burning on these. All letters and comments welcome, as per usual, and subject to the usual conditions.

TECH TIPS

LOADED QUESTIONS

SIMON N GOODWIN gives the definitive run-down on Spectrum storage techniques: cassettes, cartridges, wafers and disks

THE Spectrum has a cassette storage system that is remarkably reliable by micro standards, but still slow and inconvenient compared with more expensive systems. This article considers the pros and cons of cassette filing, and compares the alternatives.

Audio cassettes were not designed to store data, so the computer has to turn numbers in memory into sequences of tones so that they can be recorded on tape. Each file starts with a long, continuous tone, intended to make the tape recording circuitry settle down before valuable data is recorded. Normally it doesn't matter if you start loading in the middle of the tone, but you mustn't miss it completely.

After the long tone comes 17 bytes of 'header' data, holding the file name, type, length and other information needed to make sure that the body of the file ends up in the right place. Then comes a shorter tone, a pulse to distinguish the next block from a header, and as many data bytes as the header indicated.

The Spectrum writes files of three different types: PROGRAMs, CODE and DATA. Programmers can invent other file types, but most use schemes similar to the standard one.

A PROGRAM file contains program lines and variable values, in the internal 'tokenised' form in which the computer stores them. You can specify a line number for the program to start from when you reload it.

When a program loads, the new code is sorted over the top of any BASIC you'd entered before, unless you typed MERGE, in which case the new file is temporarily stored after the existing code and then interleaved with the previous program after loading has finished. It can take quite a long time for the computer to sort out all the MERGEd lines of a large file.

You can speed up the saving and loading of a program considerably by typing CLEAR to discard arrays and variable values before you SAVE. Sometimes it's convenient to keep these values with the lines in the file, but often they can be recreated (from DATA, for instance) and in those cases it's usually a waste of time and tape to save both the values and the code to work them out.

CODE files are copies of the contents of an area of memory. Their header contains the address from which they were saved – which you can overrule later when you reload the file, if you wish – and a length in bytes. A SCREEN$ file is just a special case of a CODE file; SCREEN$ tells the Spectrum to use the area of memory from address 16384 to 23295 – the chunk of memory normally used to hold the display.

DATA files are probably the least-used type of Spectrum file. Most computers store data as a stream of text, recorded and read sequentially on tape or, better still, disk. The Spectrum can't easily do that, because it can't turn the tape recorder motor on and off under computer control. Data would get spread all over a tape if it was output piecemeal as a program ran.

So the Spectrum lets you save arrays – tables of text or numbers – as if they were programs. You can reload these later, without upsetting your program, but you can only save one array at a time, and there's no way to save single undimensioned strings, although the computer won't stop you trying!

VARIATIONS

The pilot tones and header take a fair bit of time to pass the tape head, and contain lots of useful information, so software houses often create files without headers. These load more quickly and are more difficult for people to copy without permission; it's necessary to look through the program that loads prior to the headerless file in order to find the exact machine code instructions that load it, so you can tell how long it is or where it should go.

The principle of storing data as tones is very flexible: the higher the pitch of the tone the more data you can store on tape, since higher pitches means faster pulses; normal recordings contains around 200 bytes a second.

So called 'hyperload' or 'turbo' cassette routines use non-

standard tones to save and load 50% faster than normal, or even faster. This means they load more quickly and are harder to copy – for the manufacturers as well as would-be pirates! There's a program to generate customised TURBO tape routines on the Crash Tech Tape.

The snag of faster loaders is that cheap cassettes can have trouble reproducing high-pitched tones accurately, and one mistake renders a whole file useless. The faster the data is recorded the less chance that some outside event – like radio or mains interference – will disturb the loading, but the greater the probability that something will be misrecorded or misread.

The Spectrum uses a blip 1/2,000 of a second long to record a 0, and takes 1/1,000 of a second to record a 1. That means a 0 value occupies about a hundredth of a milimetre on tape, so even a fifty mechanical imperfection can stop a tape loading.

While a tape loads, the border colour is flashed as each bit is read or written. Narrow lines indicate 0 bits, while wider lines mark 1s. If the lines appear to shake up and down when loading, the tape is running at an uneven speed. In theory the system can cope with fluctuations of speed of up to 15% at any time, but in practice sudden small changes can throw it out of synchronisation.

If a tape is recorded unsteadily there's not much you can do to rescue it, except reload it from a machine that runs steadily, so you don't get two random errors added together. You won't detect an uneven SAVE unless you check the recording afterwards – remember that no account of fiddling around will let you load a file that hasn't been saved properly.

Empty memory is normally filled with 0s, so that it can be saved and loaded quickly; if you listen to a cassette you will hear the pitch of the recorded noise increase where empty areas are recorded. Small empty areas often crop up in files, because it's easier and faster to let the computer play through them than it would be to split a file into separate sections, each with their own header.

A total value or 'checksum' stored with each block of data usually warns the computer if something has been misread from tape. You can't rely on this: rare faults can mean that a program appears to load correctly but in fact contains mistakes introduced in the process of transfer to and from tape.

BAD LOADS

If you have trouble loading a cassette there are three things you can adjust in the hope of solving the problem: the level, the tone and the cassette recorder head alignment.

If the original recording was unusable there's no way you can tweak a computer to reload correctly. It's therefore a good idea to save vital files twice, on different tapes, and use the VERIFY command to check that they can be read after you've saved them.

VERIFY works like LOAD but it just compares the numbers read from tape with the values in memory. The message 'verify failed' indicates a mismatch. You should VERIFY immediately after saving important files but don't change variable values or edit the program between the SAVE and the VERIFY, or you're sure to cause a mismatch.

One of the problem with saving and reloading screens is that the name of the file is normally displayed at the start of a VERIFY action, and that changes the display so that the check is sure to fail.

If you're using a standard Spectrum without add-ons, you can disable the message in 48K BASIC by typing POKE 23736,181 before you VERIFY. This POKE doesn't work if you're using programs that load into the microdrive map area (like HiSoft BASIC) or if you've got a disk system connected; the correct address to POKE is two bytes into BASIC's CHANS area, and some utilities move that area.

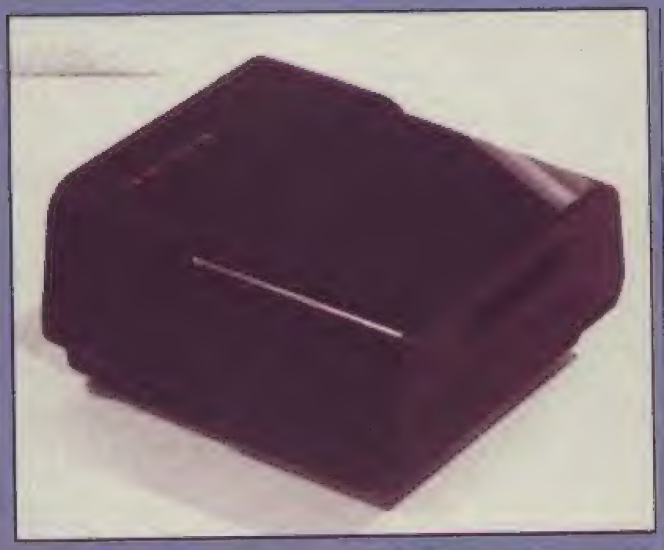
GET SET

Normally the Spectrum is very tolerant of fluctuations in level. The best bet is to set your tape recorder to a point where replay is loud, but not distorted. Always use the output from a speaker or earphone socket – a line level output is usually too weak.

A dull tone helps the Spectrum to pick out the pulses it recorded and ignore the other neeks and farps that leak onto the tape accidentally at a lower level. However, you should not make the tone too dull, or the individual pulses will blur together.

Many people have trouble loading commercial tapes because of a difference in the azimuth of their tape recorder and the recording. The azimuth is the angle of the tape head to the tape – you can usually adjust it by turning a screw holding one side of the tape head. Do this carefully, though, or you could damage the recorder.

The azimuth angle makes a big difference to the accuracy of a recording: it's most important that it should be the same when a tape is recorded and replayed, or some information may be lost. Set the azimuth by playing a professionally made music cassette and turning the screw until the tone is as bright and tinny as you can get it. You should find that one particular position sounds best, with a duller tone if you turn the screw away in either direction. It's best to use a plastic prod to



turn the screw, as a metal screwdriver can temporarily disturb the magnetic properties of the head. Use a blob of nail varnish – NOT superglue! – to stick the screw in place once you've set it correctly.

If you find that your own tapes load fine, but you often have trouble with commercial tapes, the azimuth setting of your machine may be wrong, but beware: any correction may stop the tapes you've already made from loading properly!

You may be best off using two tape recorders; keeping the old one to load your own tapes, and getting a new one to load prerecorded material. Record new tapes on the new machine – a machine that's correctly set up will always be more reliable, even though it may not load wonky recordings.

+2 TAPE

The Spectrum +2 is often supplied with the tape head incorrectly set up. You can adjust the alignment by pressing PLAY and turning the screw that can be seen through a little hole between the tape controls and the cassette door. If the machine is new, don't fiddle yourself – get it adjusted under guarantee.

You CAN connect an external tape recorder to the +2, even though it has no appropriate sockets. You have to open up the machine to add the extra wire, so again you should leave it alone unless you don't care about the guarantee. Disconnect everything, then undo the screws in the base of the computer. Five wires connect the cassette drive to the circuit board: the red and black ones convey power to the drive, and you can sometimes reduce background interference in the TV sound by putting a switch in the red wire; turn the switch off (unless you're using the internal drive) and you may find that the sound is clearer.

The blue wire carries the EAR signal, and should go to the tip of a plug connected to the EAR socket on an external tape recorder.

Yes TUb will back up most of your TAPE based software, including most of the recent jerky loaders and those programs with a counter – converts for reliable loading. Can measure speed of faster loaders, manages 100% accurately many blocks over 51k, etc, etc. **Unrivalled. On tape at £7.50.**

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Be sure to unplug this when trying to use the built-in drive. The white wire goes to the tip of the external MIC plug. The brown wire is the signal earth, which should be connected to he shaft of both jack plugs.

+3 TAPE

The +3 breaks with convention by using a stereo connector for both loading and saving, rather than two separate sockets. A stereo plug – such as a mini headphone plug – has an extra ring of metal, insulated from the tip and the shaft; the shaft is the earth, as usual. The ring carries signals into the computer (from EAR) and the tip carries them out (to MIC).

DON'T try to make a mono plug work in this socket by jiggling it around – you're almost certain to run into reliability problems. Get a proper lead made up, and curse Amstrad for not supplying one!

The first 10,000 +3s appear to have a fault that makes them relatively unreliable when loading cassettes: the automatic level control circuit seems way out of alignment on many machines. I'm trying to find out what Amstrad are going to do about this, but so far I've drawn a blank. Has anyone any further information?

ALTERNATIVES

There are two main alternatives to cassette recordings of data. Either you can opt for a continuous loop of tape, or a disk of magnetic material.

The tape loop approach is cheap but now unpopular – the drive is simple, as it only needs to move the tape at a steady speed in one direction, but access to data is slow because the entire loop must pass the head before you can be sure of loading any particular part. Tape loops tend to be expensive, and the larger their capacity the slower they work.

Two types of tape loop drive have been popular on the Spectrum: Sinclair's own microdrives, which can store 85K of data on a tiny cartridge, and Rotronics Wafadrives, which record more slowly on larger tape cartridges, available in 16K, 32K and 64K lengths. Both are out of production, but still available.

Microdrives are very impressive when they work: they give a theoretical maximum access time of seven seconds, and can load 48K in four or five seconds on a good day. There are quite a few utility programs around that let you use microdrive files, but the drives are often extremely unreliable.

Microdrive tapes sell for between £1.50 and £2.00. There's no shortage of them, as ICL and British Telecom use them as well as Spectrum and QL owners. Microdrive royalties are one of the main sources of revenue for what's left of Sinclair Research – the firm that was left with little more than debts when Sir Clive sold his computer designs to Amstrad.

When buying tapes check that they have the words 'Rega Design App' printed on the part that plugs into the drive. Some tapes produced in the early days did not have this message, and tended to have loose plastic floating around inside the cartridge, which led to reliability problems.

Middle period tapes had a very thin copper spring at the front, pressing the tape against the head. These could work loose and cause more trouble. Modern production has a much fatter and more sturdy spring. Shop carefully, as all three sorts are still available.

The Microdrive needs an interface called Interface 1, which can cope with up to eight drives but only runs one at a time. Interface 1 also provides a simple network link, allowing several computers to share information, and includes a rather peculiar serial printer port.

The Retronics Wafadrive is an all-in-one unit, containing two tape drives, plus serial and parallel printer ports. Wafadrive mechanisms are well engineered and have been dirt cheap since the manufacturers went bust, but the tapes, or 'wafas', are slow, hard to obtain and costly. The sole blank wafa manufacturer, based in the USA, has announced that prices will double this year – and 64K wafas already cost an extortionate £4 a throw.

A few good programs have been converted to work with the Wafadrive, but in general it is incompatible with most software: the drive grabs certain areas of memory and won't let programs use them. I wrote a full discussion of the quirks of the Wafadrive in the Christmas Special. In brief, avoid it if you want to use a wide range of commercial software!

DISKS

Disks work much like tapes, but record information in a series of

concentric rings. The disk turns at a steady 300 RPM and a magnetic head can step in and out to read or write data in any ring, or 'track', so you can find any part within a second or so. Before you can use a new disk it must be 'formatted'. This requires marking up into sections so that files can be kept apart.

Amstrad's +3 uses cheap Hitachi drives that can only read and write 40 tracks on one side of the disk, you can take the disk out and turn it over to use the other side. The drives use unfashionable 3-inch diameter disks in hard plastic shells, which cost between £1.50 and £2.00 and hold 178K of information on each side.

The +3 disk system is slow compared with other disk drives, but fast compared with cassette. It can load or save a 48K file in about half a minute, whereas up-to-date disk systems run at about three times that speed. Disks can be formatted quickly, though, taking around 25 seconds to do so.

The +3 adds a parallel printer interface as well as a disk drive to the Spectrum hardware, but it has many internal differences from earlier Spectrums. Quite a few popular programs are incompatible with the new machine, or don't play music because routines from earlier Spectrum 128s are missing. A list of +3 faults appeared in issue 48.

It's hard to write data-filing programs in BASIC on the +3, because there are no conventional filing commands built-in: you must pay extra for a package like BetaBASIC, Mallard BASIC or HiSOFT BASIC.

The biggest snag of the +3 is that it's extremely difficult to transfer cassette files to the disk. Most commercial programs use non-standard cassette files, and the +3 just won't let you copy them to disk at all. The only reliable way around this problem is to spend an extra £10 on a plug-in box called a Multiface 3, reviewed in this special.

Potentially, the good thing about the +3 is that commercial software for it may become available on disk. Unfortunately the software houses aren't keen to do this: disks are expensive and hard to duplicate in bulk, compared with cassettes.

DISK STANDARDS

Other disk systems use very cheap 5.25-inch diameter disks, in thin floppy plastic wallets, or the new, tougher, but more expensive 3.5-inch disks designed by Sony.

Single-sided 40 track drives are still around for these disk sizes, but the most common format is 80 tracks, with two heads on the drive so that data can be read or written from both sides. This gives a capacity of 600-800K, depending upon the organisation of the data on the disk.

There have been lots of different types of Spectrum add-on disk system, but only three are still in production: the Disciple, Plus D and Swift Disc. All of them are about three times faster than the +3, although they do slow down slightly when there are lots of files on a disk.

All of them allow file-handling from ZX BASIC, and all of them let you transfer commercial programs to disk without any hassle. Disk formatting is slightly slower, even allowing for the difference in capacity, but you don't have to do it so often since the disks can store more.

The Plus D, from Miles Gordon Technology, is the cheapest upgrade and works very well. An interface that lets you plug in a standard disk drive and a parallel printer sells for £50; the interface and a 780K 3.5-inch drive cost £130. The Plus D was reviewed in detail last month.

The Swift Disc system, from Sixword, costs £75 for a disk interface with Kempston joystick and serial printer ports. £150 gets you a 640K drive as well. Both the Swift Disc and the Plus D come with similar 80 track double-sided drives, but the different organisation of data on the disk accounts for the variation in capacity.

The Swift Disc was reviewed in Crash issue 45. It has a 'through port' (unlike the Plus D), so you can plug in other add-ons while you're using the Swift. The only way to do this with the Plus D is by a 'splitter' which divides the signals from the computer in two before they reach the interfaces.

The Swift Disc printer interface works, but it's not as clever or flexible as the ones in the Plus D or the Disciple. Conversely, the Swift system has friendlier disk handling software, which lets you do just about anything, anytime.

Sixword have opted for total microdrive compatibility, so that anything designed to work with the microdrive will work with their disk system without alteration. They do, however, charge £12 extra for a 'microdrive emulator' that provides this perfect compatibility. The Swift Disc is also the only add-on disk system that works with microdrives plugged in at the same time.

The Disciple was designed by Miles Gordon but sold by Rockfort Products. It is the Plus D's big brother and the interface alone sells for around £90. Besides most of the Plus D features it has a through port, two joystick ports and connections for a network that allows several computers to share disks and printers. There have been a number of problems with the built-in software in the Disciple, so you should get the latest version you can: versions 3B or 3C have been recommended to me. The Disciple was reviewed by Franco Frey in Crash issue 30.

'Serious' users often buy disk systems, so it's important that file-handling utility programs are compatible, as well as games that just load and ignore the disk thereafter. Some good utilities are specially produced or adapted for the Disciple and Plus D, and many but not all microdrive programs will work with the MGT interfaces.

Next month Simon N Goodwin examines the pros and cons of the forthcoming CP/M and BASIC languages for the +3.

Disk system contact addresses:

Miles Gordon Technology: ***Unit 4, Chesterton Mills, French's Road, Cambridge CN4 3NP.*** **Tel 0223 311665.**

Sixword Ltd: ***26 Church Road, Warsash, Southampton, Hants SO3 6GD.*** **NEW Tel 0243 771689**

Rockfort Products: ***81 Church Road, London NW4 4DP.*** **Tel 01 203 6143**

THE CRASH TECH TAPE

Don't forget that the Crash Tech Tape is still available, and includes loads of helpful and useful routines aimed at anyone interested in the Spectrum's technicalities.

Side one of the tape contains ZIP 2, a BASIC compiler and a BASIC game to show off its capabilities. There's a turbo tape loader, and a BASIC program protection analysis routine. A simple multi-tasking program allows three 16K programs to run simultaneously in 48K, and a new character set (as seen on TV!). For users of the Serial 8056 printer, there's also a machine code COPY command.

For the musically-minded, side two features a real-time sound effects editor, a sample converter to exchange samples between Cheetah's SpecDrum and the RAM Music Machine, a SpecDrum sound editor and four new SpecDrum sounds including a new snare drum and an 'orchestral thump'!

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It's that time of year again when we ask loads of questions and find out what you like and don't like. Some questions may seem quite nosey, but they all go to help us shape the magazine the way YOU want.

So, please fill out this form to the best of your ability, and send it (or a photocopy if you don't want to cut up your CRASH) to **CRASHTIONNAIRE, CRASH Towers, PO Box 10, Ludlow, Shropshire SY8 1AQ** to arrive here before May 9th 1988

The first form drawn out of Mailbag after this date earns the sender £50 worth of software of his or her choice, plus a CRASH cap and T-Shirt. The next four forms drawn earn their senders £20 worth of software, plus a cap and T-Shirt.

THE BASIC STUFF

ARE YOU . . .
MALE ☐
FEMALE ☐

HOW OLD ARE YOU?
.....

OCCUPATION

ARE YOU . . .
At school ☐
At College/University ☐
Working Full Time ☐
Working Part Time ☐
Unemployed ☐

MONEY MATTERS

ON AVERAGE, HOW MUCH DO YOU SPEND ON COMPUTER GAMES EVERY WEEK?
£2-£5 ☐
£6-£10 ☐
£11-20 ☐
More Than £20 ☐

HAVE YOU PURCHASED A UTILITY IN THE LAST SIX MONTHS?
YES ☐
NO ☐
If YES, please state type
.....
.....

DO YOU INTEND TO PURCHASE A UTILITY IN THE NEXT SIX MONTHS?
YES ☐
NO ☐
If YES, please state type
.....
.....

HAVE YOUR PURCHASED A PERIPHERAL IN THE LAST SIX MONTHS?
YES ☐
NO ☐
If YES, please state type
.....
.....

DO YOU INTEND TO PURCHASE A PERIPHERAL IN THE NEXT SIX MONTHS?
YES ☐
NO ☐
If YES, please state type
.....
.....

DO YOU INTEND TO BUY A NEW COMPUTER OR GAMES CONSOLE IN THE NEXT SIX MONTHS?
YES ☐
NO ☐
If YES, please state make and model
.....
.....

WHAT IS THE MAJOR INFLUENCE ON YOUR DECISION TO BUY A COMPUTER GAME (PLEASE INDICATE IN ORDER OF PRIORITY 1-6)
Friend's Recommendation ☐
Magazine Review ☐
Advertising ☐
Author ☐
Producer ☐
Price ☐

ARE YOU WELL READ?

WHEN DID YOU FIRST BUY CRASH?
.....

HOW MANY ISSUES HAVE YOU BOUGHT SINCE THEN?
ALL ☐
SOME ☐
If some, How many?
.....
.....

ON AVERAGE, HOW MANY OTHER PEOPLE READ YOUR COPY OF CRASH?
.....

HOW DO YOU GET CRASH?
Subscription ☐
Reserved or delivered by newsagent ☐
Off the shelf ☐

THE BASIC STUFF

WHICH OTHER MAGAZINES DO YOU BUY/READ? IN THE CORRESPONDING COLUMN, IN ORDER OF PREFERENCE (1, 2, ETC), PLEASE MARK THE MAGAZINES YOU BUY REGULARLY PLUS THOSE YOU READ BUT DO NOT PURCHASE YOURSELF

	BUY	READ
ACE	☐	☐
Computer & Video Games	☐	☐
Games Machine	☐	☐
Sinclair User	☐	☐
Popular Computing Weekly	☐	☐
Your Sinclair	☐	☐
Other (Please Specify)	☐	☐

.....
.....

WHAT TYPE OF GAME DO YOU ENJOY PLAYING (IN ORDER OF PREFERENCE 1-6)?
Adventures ☐
Arcade Adventures ☐
Shoot 'em ups ☐
Simulations ☐
RPG ☐
Strategy ☐
Other (Please Specify) ☐
.....
.....

IN GENERAL . . .

PLEASE AWARD MARKS OUT OF TEN FOR EACH OF THE FOLLOWING FEATURES IN CRASH
Adventure Trail ☐
Advertisements ☐
Charts ☐
Classifieds ☐
Competitions ☐
CRASH Course ☐
Editorial ☐
Et Al ☐
Forum ☐
Frontline ☐
Jetman ☐
King Grub ☐
News ☐
On The Screen ☐
PBM ☐
Previews ☐
Results and Winners ☐
Reviews ☐
Robin's Scores ☐
Money Saving Offers ☐

Subscription Offers ☐
Techniche ☐
Tips ☐

ANY COMMENTS ABOUT ANY OR ALL OF THE ABOVE?
.....
.....
.....

SOFTWARE COVERAGE

PLEASE RATE CRASH'S COVERAGE OF SOFTWARE OUT OF TEN
News ☐
Previews ☐
Reviews ☐

REVIEWS

ARE THE REVIEWS DETAILED ENOUGH?
YES ☐
NO ☐

ARE THE REVIEWS LONG ENOUGH?
YES ☐
NO ☐

ARE THERE ENOUGH SCREEN SHOTS?
YES ☐
NO ☐

ARE THE COMMENTS DETAILED ENOUGH?
YES ☐
NO ☐

HOW OFTEN DO YOU AGREE WITH RATINGS?
Always ☐
More Often Than Not ☐
Occasionally ☐
Rarely ☐
Never ☐

WOULD YOU LIKE TO SEE THE RATINGS SYSTEM CHANGED OR IMPROVED?
YES ☐
NO ☐
If YES, how? . . .
.....
.....

DO YOU USE CRASH AS A SOURCE OF REFERENCE WHEN BUYING SOFTWARE?
Always ☐
Sometimes ☐
Never ☐

WHAT DO YOU THINK OF THE STANDARD OF CRASH'S COVERS?
Great ☐
OK ☐
Rubbish ☐

IS THERE ANYTHING YOU'D LIKE TO SEE IN CRASH, OR IS THERE SOMETHING WHICH YOU FIND PARTICULARLY AGGRAVATING. CONSTRUCTIVE COMMENTS PLEASE . . .
.....
.....
.....
.....
.....

WHICH PRODUCTS WOULD YOU LIKE TO SEE INCLUDED IN THE CRASH HYPERMARKET? (THESE NEED NOT BE COMPUTER RELATED)
.....
.....
.....

OTHER STUFF

WHAT IS YOUR WEEKLY INCOME?
Up to £5 ☐
£5 to £10 ☐
£10 to £30 ☐
£30 to £100 ☐
£100 to £200 ☐
£200 plus ☐

WHERE DO YOU BUY MOST OF YOUR CLOTHES
Large Retail Chains (Woolworth etc) ☐
High Street Fashion Shops (Next, Top Man etc) ☐
Specialist Fashion Shops ☐
Other (Please specify) ☐
.....
.....

DO YOU HAVE ACCESS TO A RECORD, CASSETTE OR CD PLAYER
YES ☐
NO ☐

ON AVERAGE, HOW MANY SINGLES DO YOU BUY A MONTH
.....

ON AVERAGE, HOW MANY LP RECORDS DO YOU BUY A MONTH
.....

ON AVERAGE, HOW MANY CASSETTES DO YOU BUY A MONTH
.....

ON AVERAGE, HOW MANY CDS DO YOU BUY A MONTH
.....

HOW OFTEN DO YOU BUY CANNED DRINKS?
More than once a day ☐
Once a day ☐
Every other day ☐
More than once a week ☐
Once a week ☐
Less than once a fortnight ☐
Never ☐

HOW OFTEN DO YOU BUY CRISPS, SWEETS AND PEANUTS?
More than once a day ☐
Once a day ☐
Every other day ☐
More than once a week ☐
Once a week ☐
Less than once a fortnight ☐
Never ☐

HOW OFTEN DO YOU GO TO THE CINEMA?
Once a week ☐
Every other week ☐
Once a month ☐
Every other month ☐
Less than twice a year ☐
Never ☐

WHAT WERE THE LAST TWO FILMS YOU SAW?
.....
.....

HOW OFTEN DO YOU BUY BOOKS
Once a week or more ☐
Once a fortnight ☐
Once a month ☐
Less than once a month ☐

WHAT TYPES OF BOOKS DO YOU BUY?
Horror/Fantasy ☐
General Fiction ☐
Film and TV tie-ins ☐
Computer ☐
Thrillers/detective ☐
Historical ☐
War ☐
Romantic ☐
Sci-fi ☐
Humorous ☐
Non-fiction ☐

HAVE YOU ANY OTHER HOBBIES APART FROM PLAYING COMPUTER GAMES?
YES ☐
NO ☐
If YES, explain further
.....
.....

.....
DO YOU PARTICIPATE IN SPORT?
YES ☐
NO ☐

If YES, list your three favourite sports
.....
.....
.....

DO YOU HAVE ACCESS TO A VIDEO RECORDER?
YES ☐
NO ☐

IF YES, HOW OFTEN DO YOU HIRE PRE-RECORDED TAPES?
Once a week or more ☐
Once a week ☐
Once a fortnight ☐
Once a month ☐
Less than once a month ☐

HOW OFTEN DO YOU BUY PRE-RECORDED TAPES?
Once a week or more ☐
Once a fortnight ☐
Once a month ☐
Less than once a month ☐

DO YOU HAVE A BANK ACCOUNT?
YES ☐
NO ☐

IF YES, PLEASE STATE BANK AND TYPE OF ACCOUNT (DEPOSIT, CURRENT ETC)
.....
.....
.....

DO YOU HAVE A BUILDING SOCIETY ACCOUNT
YES ☐
NO ☐

IF YES, PLEASE STATE BUILDING SOCIETY AND TYPE OF ACCOUNT (DEPOSIT, CURRENT ETC)
.....
.....
.....

WHICH OF THE FOLLOWING TAKEAWAY FAST-FOOD CHAINS DO YOU PREFER (MARK 1-6)?
Macdonalds ☐
Wimpy ☐
Kentucky Fried Chicken ☐
Pizzaland ☐
Pizza Hut ☐
Local Fish and Chip Shop ☐
Other (please specify) ☐
.....
.....

WHICH TV STATION DO YOU WATCH THE MOST
BBC 1 ☐
BBC 2 ☐
ITV ☐
Channel 4 ☐
Satellite ☐

HOW MANY HOURS DO YOU SPEND WATCHING TV PER DAY?
Up to one ☐
One to three ☐
Three to five ☐
Five or more ☐

WHICH RADIO STATION DO YOU LISTEN TO?
Radio 1 ☐
Independent commercial ☐
Local BBC ☐
Radio Luxemburg ☐
Pirate ☐

NAME .....
ADDRESS .....
.....
.....
POSTCODE .....

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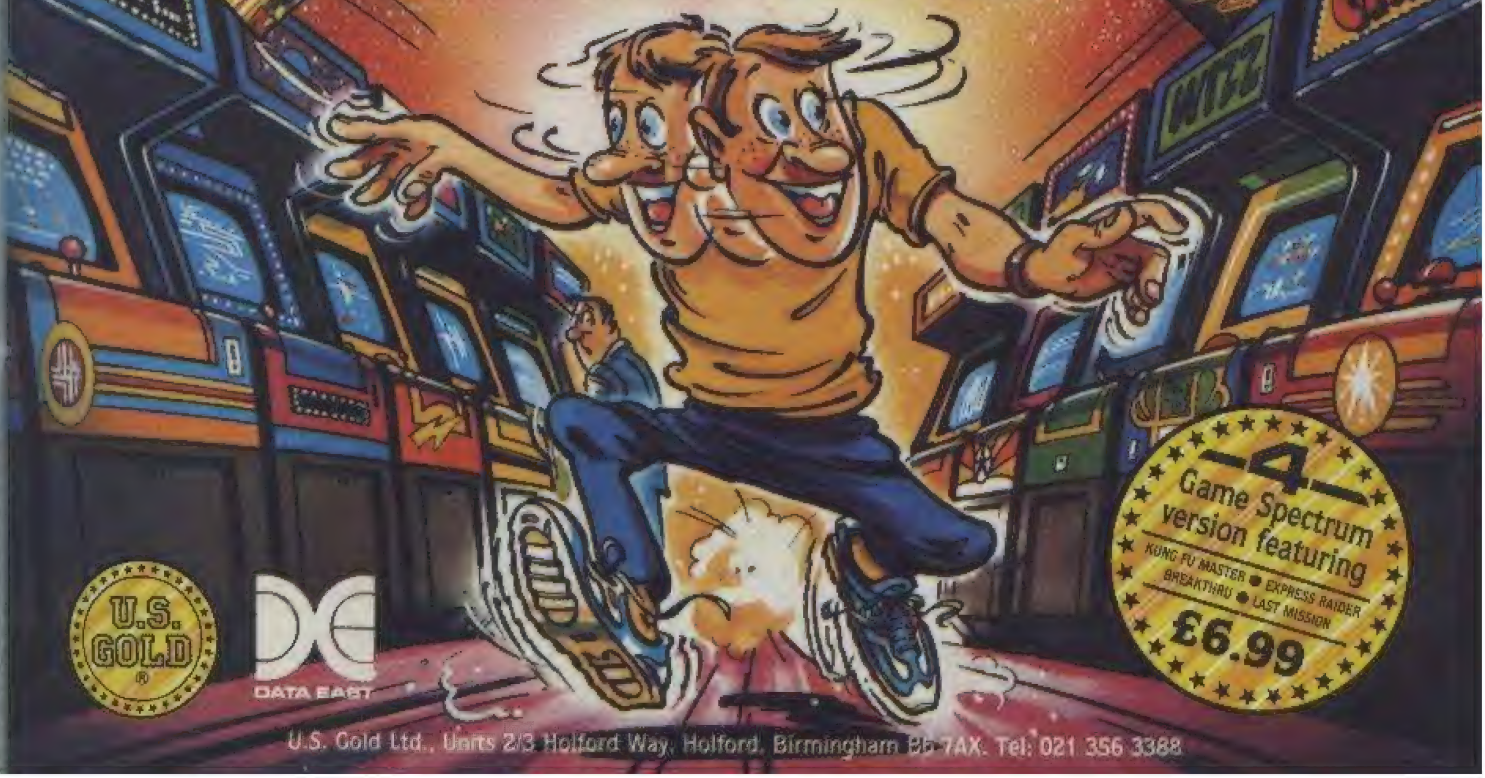

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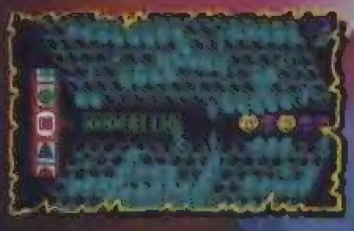

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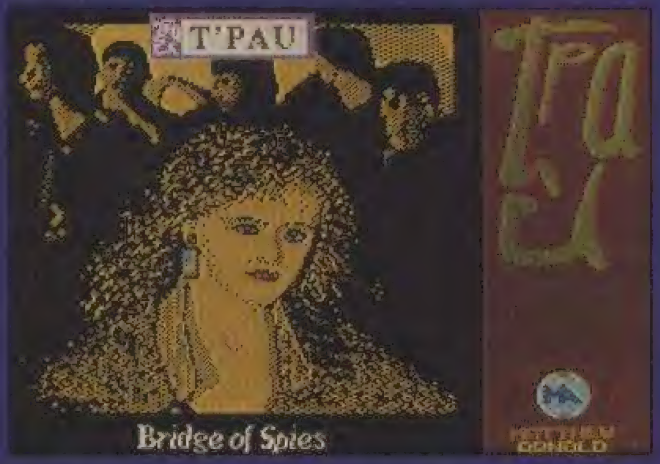
MIKE DUNN has decided to hang up his beret and brush for a mortar board and calculator, and is busy studying to be a nuclear brain geologist or something. From now on, MARK CASWELL will be introducing your Spectrum SCREEN$, and so, without further ado . . .

◄ Meat is Murder says Gary Levitt from Walthamstow in London, echoing the thoughts of Morrissey and the gang.

▼ Here's one dude I wouldn't like to meet on a dark night: Night Wolf, by Simon George of Oxford.

► Kevin Willcocks, from my old stamping ground of Sunbury on Thames, freely admits that his picture entitled Freddy, was inspired by the Freddy's Revenge picture in issue 49. By the way, the short passage in the top right corner of the screen is shown at the beginning of the film, so there.

▲ As this is the Chinese year of the Dragon, I thought it would be nice to add this colourful screen piccy, courtesy of Jason Scott from Lancaster.



▲ A musical interlude now from the maestro of the computer screen, Matthew Arnold from Newport Pagnell in Bucks. After impressing everyone with his excellent Communards picture a couple of issues back, he doth return with another album cover piccy, this time from Bridge of Spies by T'pau.

Well, that just about wraps it up for this month. Don't forget to include with your tape/disk a list of software that you'd like if your screen gets printed. Remember the new software prize? It's £40 worth of software for the best entry, and £10 worth for everyone else featured. And if you don't want me to keep your entries, you must send an SAE!

Keep your ego happy and your software collection bulging: send your screen dumps to MARK CASWELL, ON THE SCREEN, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB.*

LOOKING FOR AN OLD ANGLE

From Ultimate's classics to the cute and quirky Head Over Heels**, we've had our arcade adventures in the strange 3-D of isometric perspective.**

But, says WILL BROOKER, some of those first tentative steps in the new dimension work better than today's glossy games.

3D Ant Attack
Batman
Head Over Heels
Highway Encounter
Knight Lore
Nightshade
Quazatron
Rogue Trooper
TLL

WAY, way back when Hungry Horace was still a national hero, *3D Ant Attack* sneaked out under the Quicksilva label. Its Softsolid graphics of the walled desert city Antescher were hailed as astounding, and *3D Ant Attack* wedged itself firmly into Spectrum history as the first game with truly three-dimensional views.

The next isometric blockbuster was Vortex's *Android 2*, released in the spring of 1984. In gameplay it's just a 3-D version of the old arcade game *Berserk*, but the graphics (which CRASH gave 96%) brought it up to this magazine's Game Of The Month standard.

Programmer Costa Panayi followed this up with the impressive *TLL* – a fighter-plane simulation with a carefully worked-out dynamic playing area. There's not a lot of game behind it, but the flying is enough.

The Softsolid technique was soon followed by the first 3-D 'adventure movie' – Hewson Consultants' *The Legend Of Avalon*. Its adventure element is a bit dubious, and the term 'arcade adventure' would be disputed for years after its release, but the game was a great success with its colourful, pseudoisometric graphics.

In 1985 the spate of high-quality isometric games continued: Ultimate's classic *Knight Lore* was followed by another Vortex game, *Highway Encounter*, and the next technical advance was Filmation 2. An Ultimate invention, this allows graphics of *Knight Lore*'s quality to be scrolled smoothly over a large playing area. Filmation 2 was used for Ultimate's *Nightshade*, but was soon knocked into a cocked hat by The Edge's *Fairlight*.

Even back in the golden year of 1986 there were unimaginative clones which sometimes threatened to swamp all the review pages with their identical, and by then extremely boring, isometric screens. But some games brought a breath of fresh air to the already tired genre: the humorous *Sweevo's World* from Gargoyle Games, Ocean's surprise hit *M.O.V.I.E.*, and Hewson's *Quazatron*. A Spectrum version of the Commodore 64 hit *Paradroid*, *Quazatron* amazed everyone by being superior to the original.

Not so original but also well-implemented was Ocean's *Batman*, and Quicksilva's *Glider Rider* deserves a mention along with Design Design's *Rogue Trooper* for taking a gamble and nearly succeeding.

Last year Ocean had a megahit with *Head Over Heels*, M.A.D. had a budget Smash with *Amaurote*, and Gargoyle brought out the first (and probably last) Hydromation game, *Hydrofool* – the sequel to *Sweevo's World*. CRL's *3D Gamemaker* utility now enables everyone to rewrite *Knight Lore*, and last November saw the first real isometric adventure, Incentive's *Karyssia*.

Of course, whether isometric perspective presents a 'true' 3-D view is arguable – the player in these games is 'positioned' somewhere up in the air, outside the playing area, so any game using the technique looks forced, like a technical drawing. Though its representation of object and rooms may be highly effective, if we're going to nit-pick we can't say isometric perspective gives a *realistic* view.

But the technique has proved perfectly satisfactory for countless games, and it's pointless to damn them all for lack of realism.

More significantly, it will be interesting to see if the market for isometric graphics ever dries up, and if the public will one day reject the genre as outdated and overused, just as it once refused to accept any more *Pacman* clones.

3D ANT ATTACK
Quicksilva

87% Issue One

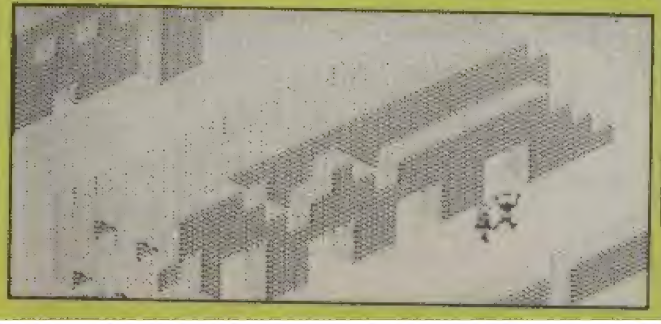
'One day, one year, one hour,' says the introduction, He and She arrived in the walled city of Antescher, 'the signature of a long dead race, the city lost from the world of men for days without number'.

But the Ants of Antescher now have your partner (either He or She – unfortunately, this admirably nonsexist feature is undermined by the program's always calling you a 'hero'), and your job is to rescue him or her with the help of some heavy-duty grenades.

Complete one level and the foolish girl (or boy) goes and gets herself (or himself) captured again, but this time further away from the starting position. Well, that's life . . .

Back in late 1983 when nobody worried about glaring white backgrounds, UDG-sized graphics and poor sound, *3D Ant Attack* was a wonder to behold. But even if you overlook these faults the fact remains that there isn't much gameplay, and what there is soon grows repetitive. Next to modern software, *3D Ant Attack* looks rather dismal.

22%



RUN IT AGAIN!

TLL
Vortex

81% Issue 7

TLL involves navigating a landscape sprinkled with houses, pylons, cliffs and bridges in order to eliminate 'enemy dots'. This top-priority procedure (you don't know how dangerous enemy dots can be if you let them get out of hand) is carried out by swooping low over the ground (hence the title – Tornado Low Level).

You always run the risk of crumping your fighter against an obstacle, and once five of the dastardly dots have been wiped out a new mission begins – it's on the same landscape, but this time those devils are hiding below bridges and in the water and all sorts of underhand places.

► **Paying off old dots: despite an unlikely dot-destroying scenario, *TLL* flew well along the border of arcade and simulation**

TLL was seen as a masterpiece when it first appeared, and its appeal has hardly diminished since. The landscape is described in effective, clean washes of colour and the fighter is well-drawn, rotating smoothly. The whole thing handles really well and though destroying evil dots is a bit of an artificial exercise the dynamics of the game come together perfectly.

Perhaps more a simulation than an arcade game, *TLL* would, I'm sure, still do well at a budget price.

76%

BATMAN
Ocean

93% Issue 28

CRASH's Overall comment described this as 'a neatly finished game which does Batman proud'. But Ocean took all the Batman mythos and promptly forgot about it in an (admittedly commercially successful) attempt to cash in on *Alien 8* etc – this game has nothing to do with Batman.

Even the main character graphic shows a squat little figure who looks more like a Smurf than the Caped Crusader. And the Batcave has become some sort of architectural monstrosity furnished with conveyor belts and spiked floors and populated by creatures ranging from puppy dogs to lion-headed mutants.

HEAD OVER HEELS
Ocean

97% Issue 39

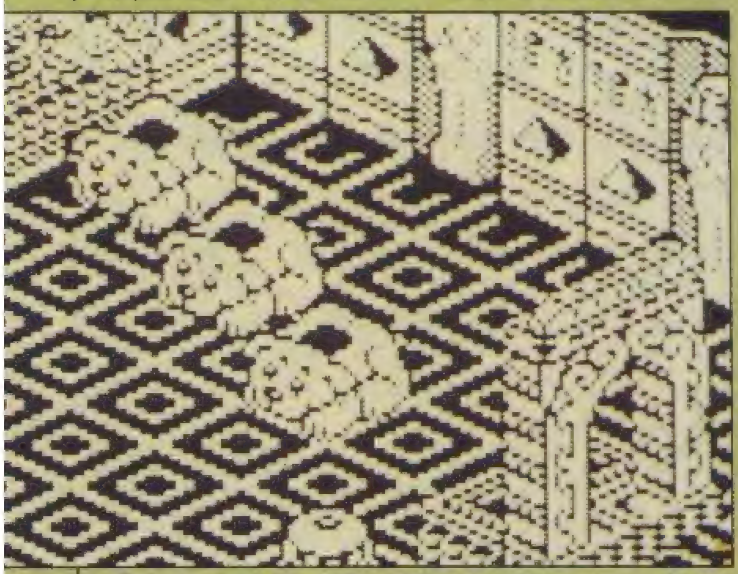
'The best Ritman/Drummond game yet – it's even better than Batman!' said CRASH. We read on: 'cuddly', 'cute'.

I agree; and that's probably what puts me off *Head Over Heels*. I can do without poisonous Marmite jars, stuffed rabbits, reincarnation fish and doughnuts, especially when their purpose in the game bears no relation to their appearance (why should stuffed rabbits give you extra abilities?).

The scenario is unoriginal (two spies from the planet Freedom are out to destroy the Evil Empire), and the graphics look like something you see on early-teatime children's ITV (not that I watch it). Yes, they're detailed and well-animated; yes, they're cute if you like that sort of thing; but there's nothing to link them all together.

As isometric arcade adventures go this is probably the best of its kind – there are lots of features, and the graphics are technically the best yet – but no way is it 'the ultimate game'. I like mine a little less silly and with a lot more logic behind them.

65%



► **Reviewers loved the cuddly sprites and pointless quirks – but has *Head Over Heels* got its feet on the gameplay ground?**

KNIGHT LORE
Ultimate

94% Issue 12

'Sheer perfection,' enthused the anonymous CRASH reviewers of way back at the sight of *Knight Lore*'s Filmation graphics.

The Filmation technique allows your sprite to physically interact with onscreen objects in almost any way, and with *Knight Lore*, the tenuously-related sequel to *Underwurlde* and *Sabre Wulf*, Ultimate's programmers surpassed themselves.

In this thrilling instalment Sabreman (the player) must brave the castle of the wizard Melkhior to find the ingredients of the potion that will cure his sudden lycanthropy (Ultimate's instructions take the form of an epic poem, but manage to say nearly the same thing). Fail, and you must remain the werewolf forever – but so what? He's a darn sight cuter than Sabreman.

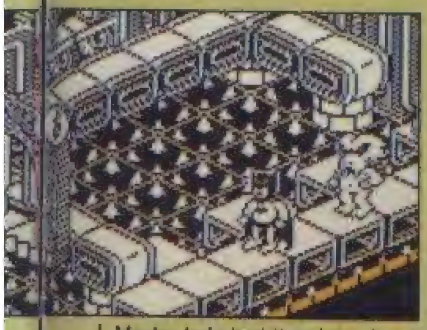
Melkhior's castle is divided into rooms full of traps, structures and useful objects, all of which can be manoeuvred using Filmation. The avalanche of isometric games in this style has lessened the impact of *Knight Lore*'s graphics. Today they seem rather plain and simple, though the old Ultimate touches still stand out (the sprite looking warily over his shoulder, for example).

The game itself is a little unsophisticated for our times, too: essentially it's just a set of *Manic Miner*-type problems of timing, jumping and avoiding, and Filmation only comes in useful for making higher leaps.

Still, *Knight Lore* deserves some recognition for having started off the isometric-arcade-adventure genre proper – it's just a pity the subsequent deluge was so heavy.

51%

► **Filmation fame: Ultimate's *Knight Lore* was followed by a deluge of isometric arcade adventures**



Maybe he's had it redone, but it never looked that way in the comics, the TV series, the films and the graphic novels . . .

All that aside, *Batman* is quite a good game. The graphics and animation are superior to Ultimate's, and the Bat Devices and Batpills which give Fatman extra abilities add interest to the gameplay. In fact, leave out the pseudo*Batman* scenario and title and I'm quite content with this.

73%

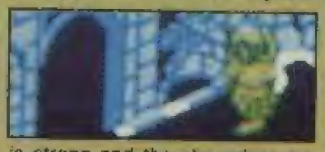
NIGHTSHADE
Ultimate

91% Issue 21

Nightshade just scraped into the Smash bracket, and the autumn 1985 release is now generally considered to have marked the beginning of the end for the former masters of Spectrum software at Ultimate.

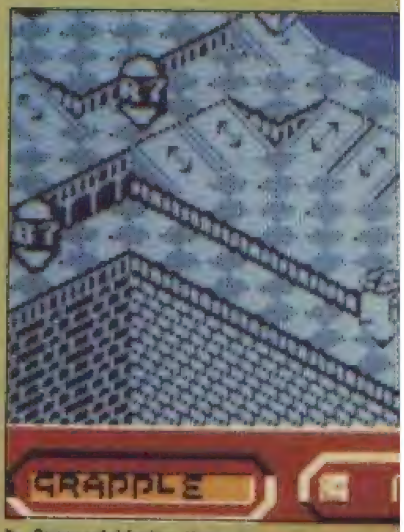
The gameplay is similar to *Atic Atac*'s: wandering around the playing area (in this case a medieval town) destroying materialising nasties and collecting 'super antibodies' to kill off the four major villains. But the real star of *Nightshade* is the Filmation 2 technique, which scrolls the highly-detailed buildings about and lets you effectively see through the walls in a cut-away view whenever you pass behind them.

It's become a cliché that 'the trouble with Ultimate's games is that they have great graphics but no game bolted on', but in this case it's undeniably true. Though the pseudomedieval atmosphere



is strong and the characters are well-animated, *Nightshade* is extremely boring. It eventually boils down to searching in vain for the major villains, just for the dubious thrill of getting killed by them instead of by lesser monsters for a change.

27%



► **Successful fusion: there are strategy and arcade elements to grapple with in** *Quazatron*

HIGHWAY ENCOUNTER
Vortex

95% Issue 20

You're a lone Vorton droid, pushing a highly brainfrying explosive device to the far end of an alien highway to blow up an enemy base.

The road is populated by various aliens resembling anglepoise lamps and other dangerous household items (I gave them all names once but that was ages ago), and floating mines weave across the tarmac in dances of death.

Your only strategy is to block up or kill off the nasties on your first run, and then go back to get your slave droids and the bomb.

Highway Encounter's graphics are still impressive today; as in *TLL*, the combination of flat background colour and detailed monochrome overlays works very effectively. All the roadside scenery is beautifully drawn, from the crops in the fields to the golden sands of the beach. The only trouble with the game is its difficulty.

I still wonder at CRASH's comment of the time 'it will be easy to complete and I will probably get bored with it' – after 2½ years I still can't clear the 30 zones and get the bomb to its destination within the time limit.

► **Beautifully difficult:** *Highway Encounter*

But *Highway Encounter* looks great (better, in fact, than its sequel – Vortex's *Alien Highway*, 88%/Issue 29) and would probably still sell as a budget game.

66%

QUAZATRON
Hewson

94% Issue 29

As Klepto, a psychotic young droid with a penchant for taking things apart, you have been volunteered to get the mutant droids out of Quazatron, a multilevelled underground citadel of ramps and lifts.

Klepto starts with a measly pulse laser but can collect extra weaponry by ramming other droids and entering a grapple sequence – really a subgame.

A test of strategy and reflexes decides who wins the grappling duel. If you successfully grapple another droid you can take any available weapons; if you lose, the consequences are usually fatal. As you upgrade your weapons you can take on ever more powerful opponents, till you become the top dog – and then it's time to move on to the next citadel.

'*Quazatron* is a true masterpiece,' said CRASH at the time, and the comment is still valid. Apart from the rather jerky scrolling everything is faultless: the graphics, the music, the FX and the gameplay. *Quazatron* is a successful fusion of strategy and arcade and deserves all the recognition it's had.

81%

ROGUE TROOPER
Piranha

79% Issue 36

This licence is based on the early *Rogue Trooper* stories from the comic *2000AD*. Rogue is, as usual, trudging around Nu Earth, this time looking for the eight vid-tapes which show how the Traitor organised the destruction of the rest of the GIs (you have to know the strip to follow the scenario, really).

Nu Earth, which seems to have shrunk a little in conversion from comic to computer, is patrolled by Norts and littered with ammo, med-packs – and, of course, the tapes. And Rogue's biochipped buddies Gunnar, Helm and Bagman give onscreen advice which isn't always particularly useful (Gunnar rarely says anything more inspiring than 'Let's grease some more Nort scum').

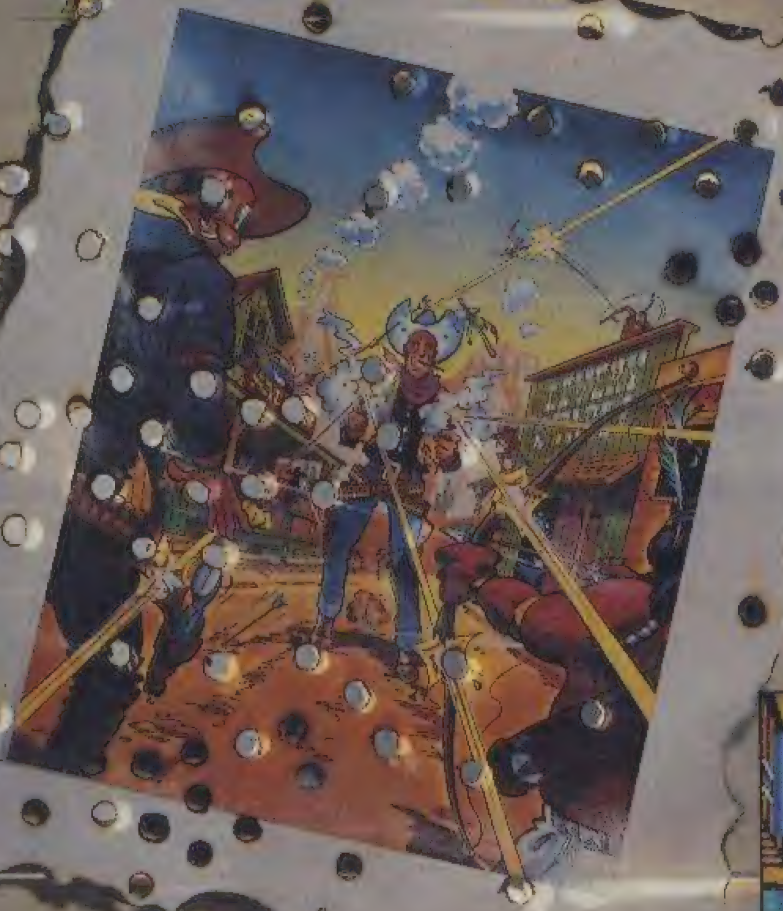
When all the evidence has been collected Rogue can return to the shuttle and wait for Cam Kennedy to draw him some more identical stories (oops! that just slipped out).

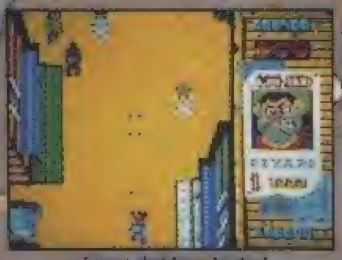
Despite the extremely tacky presentation, this is an enjoyable game. It's not hard to win, which may put some off, but it provides relaxing therapy when you need your confidence boosted a little. The graphics are detailed, varied and recognisable, and though the colour washes are used simply they add interest.

Perhaps *Rogue Trooper*'s strongest point is the atmosphere generated by the graphics and the comments; it is, surprisingly, the most faithful *2000AD* conversion yet.

69%

TOOTIN' TOOTIN' CONSTANT LOOTIN' ALWAYS SHOOTIN' SHOWDOWN!





Screen shot from Amstrad

Screen shot from CBM 64/128

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To celebrate the 51st edition of Britain's biggest-selling Spectrum magazine, we've organised an astoundingly easy-peasy competition with rewards beyond the wildest dreams of even the wildest dreamers. CRASH's generous streak means that we're throwing away 1001 weird, wonderful and whacky freebies to all you lucky readers. The first 1001 names to be drawn from a bulging sack with the correct answer to the unbelievably simple question below will receive any one of a magnificent multiload of pristine prizes.

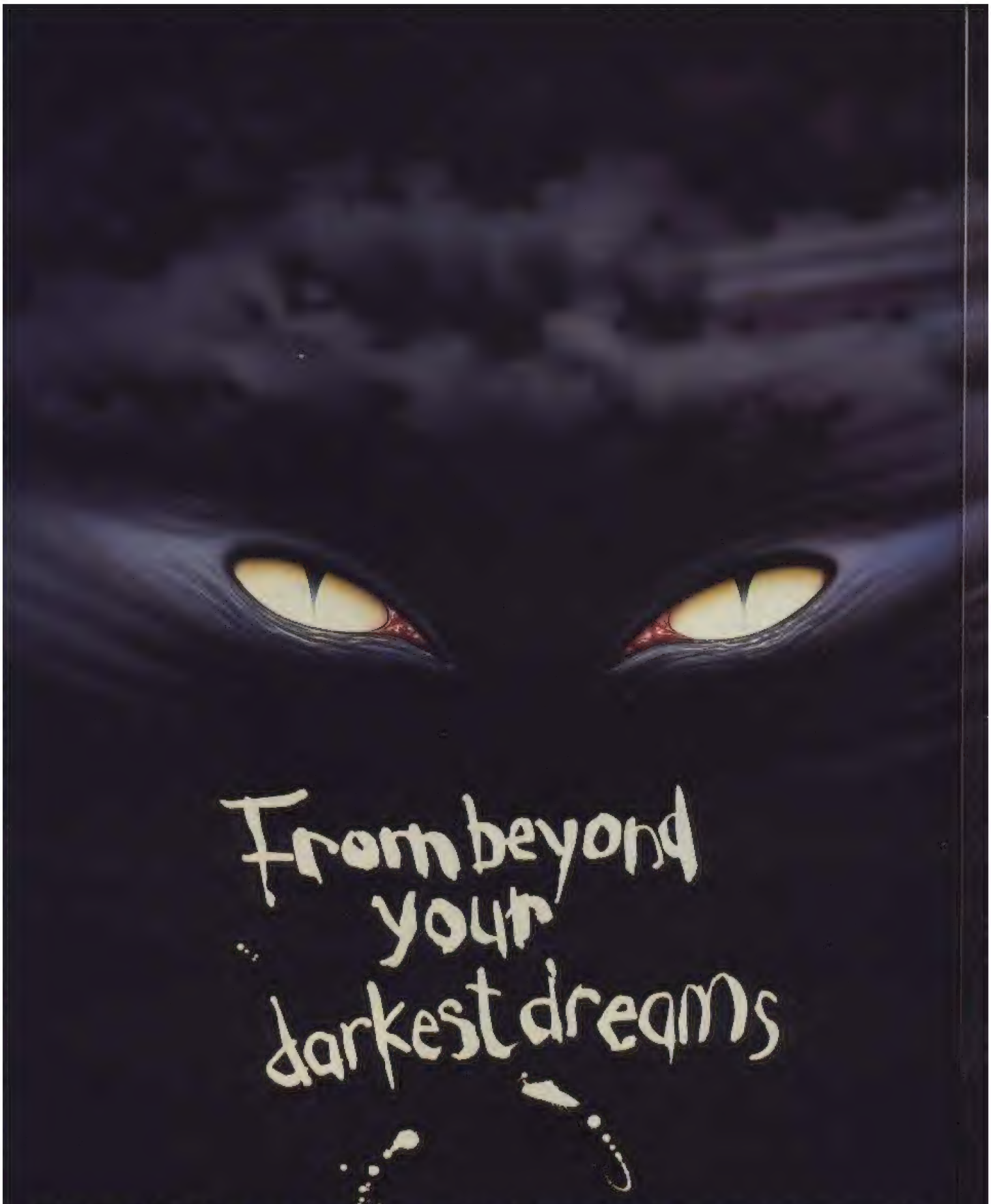
Scintillating isn't the word for this breathtakingly unique selection of spoils: most people will receive a software gift, but there are also many surprises awaiting future recipients . . .

Anyway – on with the task. Question: This is CRASH Issue 51. What number will appear on the cover of the **January** issue, 2001?

Got it? Put your answer on the back of a post card or sealed envelope, send it to the following address, and you could be the fortuitous winner of, well . . . something!

As if you didn't know by now, our address is: **CRUMBLY CRASH COMPETITION, CRASH TOWERS, PO BOX 10, LUDLOW, SHROPSHIRE, SY8 1DB.**

Entries to arrive no later than May 8th or you won't get anything.



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SIGNED

Frightmare

"Now I lay me down to sleep, I pray the Lord my Soul to keep.
If I should die before I wake, I pray the Lord my Soul to take ..."

CASCADE

Frightmare - A computer game for the Commodore 64, Spectrum, Amstrad and soon on the IBM PC. Cassette £9.95, Disk £14.95 (IBM £19.95).

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ULTIMATE
PLAY THE GAME
PRESENT
JETMAN
OUR HERO SETS COURSE FOR PLANET ZARG TO HELP FLASH GORDON FIND HIS TREASURE, LITTLE KNOWING THAT THE FABULOUS EYE OF OKTUP (THAT CAN SEE INTO THE FUTURE) HAS NOW CHANGED HANDS, OR THAT THE ASSASSIN THAT THE PLURPS WERE GROWING IS STILL ALIVE WITH A HEADACHE, OR THAT THE PIRATES ARE OUT ON THE HULL PLAYING CARDS WITH SOME OTHER ALIEN GUYS AND HAVE JUST LOST THE SHIP TO THEM, OR THAT HIS BREATH SMELLS.....
THANKS FOR THE GAME, YOU GUYS, NOW IF YOU DON'T MIND STEPPING OFF MY SHIP ME AN' MY WINNINGS WILL BE GOING ON OUR WAY!
MEANWHO.. AT THE SHIPS CONTROLS...
WHAT'S ALL THAT HATCH BANGING GOIN' ON IN THE BACK? DON'T THEY KNOW I GOTTA CONCENTRATE TO GET THIS OL' TUB MOVING?..
WHAT GIVES, CAP'N?! HOW COME YOU LET THAT ALIEN STRANGER WIN AT CARDS... HOW COME WE DIDN'T UP AN' ROB THAT ALIEN STRANGER LIKE GOOD PIRATES? HOW!...EH?.. HOW COME... HOW... EH.. HOW??
...AN I SURE WASN'T GOIN' TO UPSET HIM BY WINNING AT CAARGH!
ACK!
ZEER...
OH!
FROM THE PLURPS ASSASSIN...
HURP!
AND INSIDE THE SHIP OUR HERO'S DRIVING GETS SOME STICK...
FROM FLASH GORDON...
HURP!
HURP!
AND THE LONE SAMURAI...
HURP!
'COS THAT WUS NO ALIEN STRANGER.. THAT WUS THE LONE SAMURAI ALIEN AND THEY DON'T COME ANY STRANGER'N HIM! HE GOT MARTIAL ARTS COMING OUT OF HIS EARS... AND THE MEANEST TEMPER THIS SIDE OF WHOTSIT!
UNTIL HE TAKES HIS FOOT OFF THE GAS...
WOH! BIT HEAVY ON THE JUICE THERE, EH? I FEEL A RIGHT PRANNY!
AN' THE MOTLEY CREW COME LOOKIN' FOR BLOOD...
HEY, YOU PRANNY!
HEY, YOU PRANNY!
HEY, YOU PRANNY..
HUH?
HUH?
HUH?
IT IS GENERALLY THOUGHT THAT AT A MEETING OF ALIEN LIFEFORMS THE COMMUNICATIONS WOULD COMMENCE WITH DELIBERATE AND CAREFULLY THOUGHT OUT SIGNS BASED ON SIMPLE MATHS AND UNIVERSALLY KNOWN SYMBOLS, SUCH AS A CENTRAL SUN WITH ORBITING PLANETS. OR THAT EACH ALIEN MIGHT POINT TO ITSELF AND UTTER IT'S NAME AND AFTER POINTING AT THE OTHER, WAIT FOR IT TO ANNOUNCE IT'S OWN NAME... THIS GENERALLY WORKS VERY WELL...
UNLESS ONE OF 'EM IS A DINGBAT
POW - POW KAPOW
PYTAM TAM TAM
HAIEEE
GRAMF
RIP
SLASH
BUT THE EYE OF OKTUP.., SCUFFED IN THE FRACAS... STARTS TO GLOW!!
R.I.P. JETMAN LOONY
WOW! OUR HERO LOOKIN' FLUSHED! NO WONDER! LOOKIT WHAT THE EYE SEES FOR HIS FUTURE... BOGGED OUT, MAN!!

It's here-The return of Elvin Atombender!

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Unsurpassed Espionage Action...

After two year's wait at last it's arrived—the sequel to beat all sequels! Impossible Mission II retains all the fun and strategy of the original as once again you embark on the challenge to find a safe route to Elvin and the final showdown where he will meet his end! Search each room, find code numbers, objects and keys to help you with your mission. You must avoid or destroy the guards and robots that patrol the five towers or risk being destroyed yourself.
Successfully dispose of Elvin and your quest is half over! Now your Mission becomes truly impossible as you strive to escape the towers, avoiding guards, robots, mines, trap doors and elevators without detection!

...From the lift you enter the first room...

...But where to next?...

...Who or what is lurking behind these cars?...

...Can you access the next tower?...

...Could the final P.I.N. number be here?...

...Running into more trouble?...

...Why is the robot guarding that table?...

...A message on the tape recorder?...

...Quick! Escape from Elvin!!...

Commodore 64/128	£14.99 disk	£9.99 cassette
Amstrad	£14.99 disk	£9.99 cassette
Spectrum 48/128K		£8.99 cassette
Atari ST	£19.99 disk	COMING SOON!
IBM PC & Compatibles	£24.99 disk	COMING SOON!

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Screens from Atari ST and Commodore 64 versions.

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NATIONAL COMPUTER GA

Organised by Newsfield Publications Limited on behalf of US Gold, thNa

BIG PRIZES AND THE CHANCE TO COMPETE IN THE FINALS AT THE PERON

NEWSFIELD PUBLICATIONS is proud to announce the first ever British National Computer Games Championships open to all-comers. Six regional heats with contestants competing in two categories – Spectrum and Commodore 64/128 – will be followed by two semi-finals with the qualifying contestants going forward to compete against each other on a stand built specially for the finals at the new PERSONAL COMPUTER SHOW (formerly The Personal Computer World Show) at London's Earls Court. By filling out the entry form on these pages you could be among the 324 first-round contestants selected to play arcade games provided by competition sponsors US GOLD and put yourself on the road to fame and a big prize worth £1,000.

From May 14, a custom-designed travelling roadshow will take banks of Spectrum and Commodore computers to selected boys' clubs in six locations around Great Britain for the regional heats. The qualifying competitors will aim to raise the highest scores playing games specially selected from among the latest US Gold releases.

The event – the first of its kind – is being organised by Newsfield's magazines CRASH, ZZAP! 64 and THE GAMES MACHINE. US Gold, market leaders in computer software, are sponsoring the whole competition and providing all the prizes. The National Association of Boys' Clubs, with over 2,000 affiliated clubs 200,000 members throughout the UK, is helping to promote this exciting championship as well as providing venues for the regional heats and the semi-finals.

So what do you need to do to get yourself selected for the competition that could prove you to be Britain's best arcade game high-scorer? For a start off you don't have to be a Spectrum or Commodore owner, but to have a chance of qualifying you will need to be able to achieve the best possible scores on the listed games in the coupon – and remember, if you do qualify, not only you will be playing in public but also in front of the British press, so cheating now on the entry form will not stand you in good stead later!

HOW THE CHAMPIONSHIP WILL RUN

Six towns throughout the UK have been chosen for the regional heats, so there should be a venue not too far from you (see the separate list). The National Association of Boys' Clubs is already running a qualifying competition among its own membership, and they will be supplying three Spectrum and three Commodore entrants to each of the regional heats. We will be selecting a further 27 Spectrum and 27 Commodore entrants, from the forms you send in, to attend each of the regional heats. This means that in the first round a total of 360 contestants will fight to go through to the semi-finals. The five best high scorers in each format per regional heat will qualify for the semi-finals, making a total of 60 contestants. And from there, the three top scorers in each format will go through to the prestigious finals to be held at the Earls Court Personal Computer Show.

THE PRIZES

Apart from the thrill of displaying your joystick prowess to the world at large, there are some exciting prizes and mementoes to be won. Every qualified entrant will receive a specially designed certificate scroll to prove that they are at least considered among the 360 best arcade games players in the country. Special medals have been struck bearing the National Computer Games Championship logo on one side and the Boys' Club logo and year on the reverse; the 60 semi-finalists will each receive a bronze version of the medallion, while those who qualify for the finals will receive a silver medal. For the two outright winners, one on the Spectrum and one on the Commodore, there will be gold medals mounted in wooden display plaques.

US Gold are providing a mixture of hardware and software prizes for both winners to the value of £1,000, with valuable runner-up prizes for other finalists. On top of that, there will be free software and other gifts for finalists and semi-finalists and the chance to meet several famous personalities who will be attending the events. But perhaps the most thrilling aspect will be the chance to prove yourself the very best British computer games player in front of the vast audience attending the Personal Computer Show. And of course you will be featured in Newsfield's magazines as such.

COMPETITION RULES, ENTRY DETAILS AND VENUE DATES

The six regional heats, each comprising 30 Spectrum and 30 Commodore contestants drawn from the National Association of Boys' Clubs (three per machine) and from Newsfield magazines' entry forms will take place in the following towns:

May 14 - **Birmingham**	June 4 - **Edinburgh**
May 21 - **Gloucester**	June 11 - **Leeds**
May 28 - **Belfast**	June 18 - **London**

All days are Saturdays. Heats will be held in the mornings. The towns listed are correct at time of going to press, but the organisers reserve the right to make last-minute alterations. Qualifying entrants will be informed of necessary attendance details in good time.

BOYS' CLUBS GAMES CHAMPIONSHIPS

The National Association of Boys' Clubs & the Personal Computer Show

RSONAL COMPUTER SHOW AT EARLS COURT SEPTEMBER 16-18 1988

The semi-finals will be held in Leeds on August 16, and in London on August 18; finals at the Personal Computer Show over the three public days, September 16-18.

Friends and relatives wishing to attend the first round and semi-finals will be welcome, but the NABC will be making a very modest entry charge to non-contestants. Readers wishing to attend will also be welcome – details will be published in future issues, or you can ring the organisers' office for details no sooner than one week before these dates.

If you wish to put your name forward to qualify for Britain's first National Computer Games Championship, fill out the form as soon as possible and send it to the listed address. The high scores you give will be checked by experts both at Newsfield and at US Gold. Entrants under 18 must ensure their form is countersigned by a parent or legal guardian. All qualifying entrants must be prepared to attend the venues they select on the due dates. You may select to enter at any one of the above listed venues. The organisers will accept no claims for travel or subsistence expenses for contestants in the regional heats. All contestants qualifying for the semi-finals can claim up to a maximum of £10 for travelling expenses and will receive free software from US Gold. Finalists will be given a free weekend at the Personal Computer Show in London. During contests, the decision of the appointed judges and stewards will be final and no correspondence concerning administration can be entered into.

IF YOU THINK YOU ARE BRITAIN'S BEST HIGH-SCORING COMPUTER GAMES PLAYER GET YOUR ENTRY FORM IN TODAY! CLOSING DATE FOR ENTRIES IS APRIL 23.

THE PERSONAL COMPUTER SHOW

NATIONAL COMPUTER GAMES CHAMPIONSHIP ENTRY FORM

CR

Please write clearly, using block capitals.

I wish to put my name forward to qualify as a competitor. If selected to compete, I agree to abide by the championship regulations.

Name .....

Address .....

.....

..... Postcode .....

Telephone .....

Please tick the appropriate box:

I wish to compete on the Spectrum: ☐

I wish to compete on the Commodore: ☐

I am aged 18 or over: ☐

I am aged under 18: ☐ If you are under 18, your parent or legal guardian must sign here and print their name below:

Parent's Signature .....

Parent's Name .....

Please tick the regional heat venue you would like to attend

☐ Birmingham
☐ Gloucester
☐ Belfast
☐ Edinburgh
☐ Leeds
☐ London

In case for any reason you are asked to attend a venue other than the one you have already selected, please tick the next best alternative for you:

☐ Birmingham
☐ Gloucester
☐ Belfast
☐ Edinburgh
☐ Leeds
☐ London

In order to help us determine whether you should qualify to enter, please give your high scores on **two** of the following five US Gold Games:

OUTRUN high score is: .....

INDIANA JONES high score is: .....

720° high score is: .....

GAUNTLET II high score is: .....

RYGAR high score is: .....

And your best score on two of your favourite arcade coin-op machines:

1 Coin-op name is: ..... high score is .....

2 Coin-op name is: ..... high score is .....

Complete the form and send it to **THE ORGANISER, NATIONAL COMPUTER GAMES CHAMPIONSHIP, NEWSFIELD LIMITED, PO BOX 20, LUDLOW, SHROPSHIRE SY8 1DB.** Successful applicants will be contacted in plenty of time. Please do not ring or write to ask, it only blocks up the phone lines! And good luck!

CRASH HYPERMARKET

ARE YOU IN A BIND?

If not, you could be – just wait till your CRASHes start running away! Now you can keep them bound up in a friendly but firm blue binder embossed with the CRASH crest. Each binder holds 12 CRASHes, and comes complete with a little rub-on thingummywotsit which you, um, rub on and then the binder says '1987' on the spine, do you follow? You have to be there, really.

We could go on about the handsome tooling, the embossed title page and the rare art prints which will make this a collector's edition, but it'd all be fibbing. The CRASH binder is, however, very useful for making shelves collapse when overloaded with 164-page editions of the magazine!

£4.50

ASHES TO ASHES, DUST TO . . . SPECCY?

Franco Frey's First Law Of The Impermeability Of Materials states that a specially-designed double-seamed dust cover will, when placed over a Spectrum, inhibit its tendency toward dust equilibrium with its environment. In other words, these jobs keep your computer clean, right?

The CRASH Spectrum dust covers, which are by a curious coincidence emblazoned with the name CRASH, have been made to four different sets of measurements, to precisely fit four different kinds of Spectrums: the early, rubber-keyed model, the Spectrum +, the Spectrum 128 and the Spectrum +2.

And seriously, now, remember this small investment COULD save you big repair bills . . .

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Lloyd Mangram's four-part, 96-page CRASH History was featured in issues 45, 46, 48 and 49. This commemorative pull-out special can be stored in a custom-designed binder which is still available through the CRASH Hypermarket.

The binder is designed to also accommodate the complete CRASH indexes to reviews, tips and features which were featured in the Christmas Special.

Each binder comes with reprints of all Lloyd Mangram's CRASH lookbacks (excluding 1987, since it appeared in the Christmas Special) and some special articles and archival material on the history of the Spectrum. With the CRASH History it will form a unique CRASH book of over 120 pages.

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The three covers are: Head Over Heels's Evil Emperor (Issue 39), a monster from Oli's interpretation of the Level 9 adventure Red Moon (Issue 20), and the CRASH surfer – the ultimate Spectrum sports simulator, still wet from the waves of Issue 19!

The T-shirts are 50% cotton and 50% polyester, so everyone's happy, and they're all available in two dramatically different sizes: medium (M on the form) and Grubbish, ie extra extra large (XXL).

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CAP THAT!

This baseball-style headgear is especially designed to protect the wearer in the event of (a) King Grub or (b) a shelf overladen with CRASHes falling on his/her head.

However, the blue-and-white CRASH cap (which comes complete with an adjustable strap so one size fits all humans) is also useful for carrying water through deserts, taking charitable collections at The PCW Show, getting stones out of horses' hooves and, in extreme cases, wearing on your head.

£3.95

MULTIPLE ORDERS

You can send mail-order, Hypermarket and back-number orders in the same envelope to save postage. Just address it to **MULTIPLE ORDER, CRASH, PO Box 20, Ludlow, Shropshire SY8 1DB.**

Please remember you CANNOT send competition or charts entries, letters to the Forum or Playing Tips, or any other correspondence to the editorial and subscriptions departments in these Multiple Order envelopes. They're going to a different side of Ludlow!

BACK NUMBERS

Don't miss out!

1984

3 APR Sinclair talks to CRASH • Stack Light Rifle • Run It Again: *Missile Command* games • CRASHtionnaire results • the earliest surviving back number!!

4 MAY *The Quill* analysed • the fabled ZX Microdrive appears • Run It Again: *Pengo* games • graphics utilities • Living Guide: boardgames, simulations, strategy, adventure • the second-earliest surviving back number!! *(that's enough early back numbers – Ed)*

1985

17 JUN Denton Designs • Sinclair Story 3 • Maps: *Knight Lore, Underwurlde* • Leonardo Graphics • Datel sound sampler • Artist: David Thorpe

15 JUL Gremlin Graphics profile • Artist: Bob Wakelin • Map: *Gyron Atrium*

19 AUG CRL profile • Oliposter • roundup of BASIC compilers • Artist: Rich Shenfield • Maps: *Dynamite Dan, Shadowfire*

20 SEP Electronic Pencil Company profile • Maps: *Alien 8, Dun Darach*

21 OCT Holografix profile • Holograms • Map: *Nodes Of Yesod* • Platinum Productions profile

22 NOV Fanzine File • Microdrive tips • Artist: Susan Rowe • Fantasy Gamebooks

23 DEC Melbourne House • Computer graphics • Artist: Dave Beeson

24 XMAS 1985/6 Artist: Oliver Frey • Gargoyle Games profile • Lloyd's Lookback • Hewson profile

1986

25 FEB Durell profile • Microsphere • FORTH and extensions to ZX BASIC

26 MAR St Bride's profile • Spectrum 128 • Micronet 800 • Multiface 1

27 APR Playing Tips supplement • Mel Croucher • Imagine profile • PBM convention

28 MAY Fanzines • Martech profile • Composite Video interface • SpecDrum

29 JUN First PBM Mailbox • Homegrown software • Realtime profile • Maps: *Cylu, Sir Fred, Saboteur, Tantalus*

30 JUL Birth of a game • Laser Genius • Maps: *Tantalus, Movie*

31 AUG Software Projects • Word processing • Maps: *Pentagram, Heavy On The Magick*

32 SEP Programmer: Dave Perry • *GAC* • Maps: *Core, Ghosts 'n' Goblins, Bobby Bearing* • Echo Synthesizer

33 OCT Programmers: Jon Ritman, Costa Panayi • Maps: *Dan Dare, Cauldron II* • SpecDrumming

34 NOV Programmer: Don Priestley • Genesis Update • Maps: *Dynamite Dan II, Equinox, Universal Hero* • Music Machine

35 DEC Designer: Dan Malone • Computer Advertising • Maps: *Glider Rider, Thrust, Lightforce* • MIDI

36 XMAS 1986/87 Lloyd's Lookback • Spectrum Music • Maps: *Scooby Doo, Heartland, Druid*

1987

37 FEB John Richardson: Jetman • CRASH Reviewers revealed • *Match Day* Challenge • Maps: *Fairlight II, Firelord, Avenger, Dandy*

38 MAR Fanzines • Designer: Bernie Drummond • Maps: *Cobra, Impossaball, Uridium* • MIDI

39 APR Arcades update • The Z88 • Programmer: Steve Taylor • Maps: *Nosferatu, Double Take, Future Knight, Feud*

40 MAY Terminal Man returns • Playing Tips Supplement • Maps: *Short Circuit, Antiriad, Con-Quest, Into The Eagle's Nest, Sceptre Of Bagdad, Dragon's Lair II, Thrust II, Fat Worm Blows A Sparky, Tarzan, Aliens*

41 JUN Programmer: Mike Singleton • Industry today • Adventure Trail Supplement • Maps: *Saboteur II, Head Over Heels* • Multitrackers • 128 bugs

42 JUL 16-page *OINK!* pull-out • *Living Daylights* film FX • Programmer: Pete Cooke • Maps: *Auf Wiedersehen Monty, Hydrofool, Rasterscan*

43 AUG The +3 arrives • Run It Again runs the *Gauntlet* clones • Big trouble at *The Bug* • CRASHtionnaire results • CRL's *3D Gamemaker* • Maps: *Enduro Racer, Flash Gordon*

44 SEP Programmer: David Aubrey-Jones on *Mercenary* • The Sega Master System • Is homegrown software healthy? • Tech Tips: that Swift Disc • Forum: *Barbarian* backlash continues • The CRASH Challenge • Maps: *Vampire, The Curse Of Sherwood* • tips galore for *Killed Until Dead*

45 OCT Run It Again: the kick-'em-ups • The CRASH History Part One • In the arcades • The budget scene now • How stars are born: selling your games • On The Screen logo winners • Maps: *Game Over, Wonder Boy*

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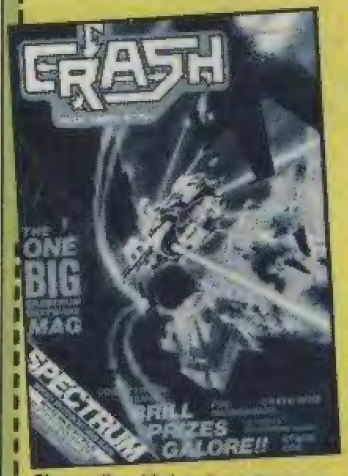

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the CRASH CHARTS

TOP GAMES APRIL

The three charts compiled from the votes of CRASH readers is the most realistic chart for gauging the popularity of Spectrum games – it is the games that are being played that get the votes, not the games that are in the shops this week or month.

And the votes are important. It's up to you to let us know what you feel, so fill in the voting forms which live on the results pages and in FRONTLINE to make your voice heard.

If you don't want to carve up your issue of CRASH, we understand. Use a photocopy if you like, or copy the details from the voting forms onto a postcard, or the back of a sealed envelope, and send that to us instead.

Apart from the satisfaction of registering your vote, there's always the chance of winning a prize. Each month we draw 15 winners from all the voting forms received – five for the HOTLINE, five for the ADVENTURE and five for the STRATEGY chart.

A top prize of £40 worth of software (your choice, not ours) and a CRASH T-shirt is awarded to the first slip drawn from the HOTLINE votes, and another £40 of goodies and a shirt goes to the ADVENTURE and £20 of goodies and a shirt goes to the STRATEGY

Four runners up from each ballot box collect a CRASH T-shirt and a CRASH Hat. So get those votes in to the **CRASH HOTLINE CHART, CRASH ADVENTURE CHART** and **CRASH STRATEGY CHART: *PO Box 10, Ludlow, Shropshire SY8 1DB.***

After suffering badly from the Match Day II **entry last month,** Exolon **returns to Number One, with the CRASH Readers' Best Sports Game of 1987 dropping to Number Three.** Driller, **like Freescape, moves slowly but surely up the chart.** Out Run's **initial appeal, shown by last month's entry at Number Ten, seems to be diminishing with the game dropping to unlucky 13.**

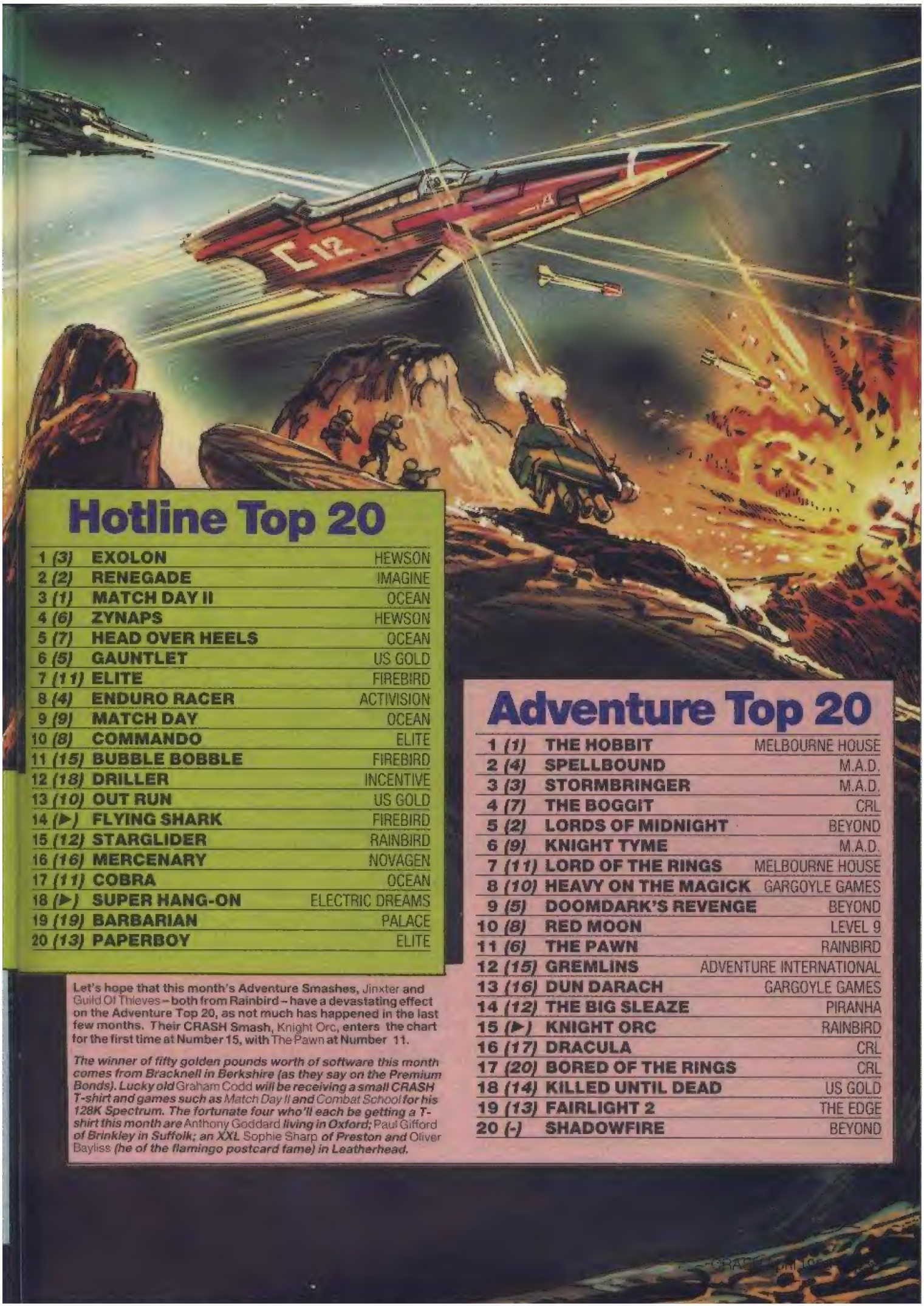
£50 worth of software will be dispatched post-haste to this month's winner of the Hotline Chart. Yes, Andrew Farquhar ***of Huntly in Aberdeenshire wins such delights as*** *Thundercats, Nebulus and Mercenary* ***which were listed among his choice of software. He'll also receive a CRASH T-shirt, just like the following runners-up. They are*** Robert Finlayson ***of Glasgow; whacky*** Wayne Walker ***who resides in Egham, Surrey; Midlander*** Miles Willmott ***of Matlock and*** Eddy Budd ***from Southampton.***

Strategy Top 10

1 (1)	**VULCAN**	CCS
2 (2)	**LORDS OF MIDNIGHT**	BEYOND
3 (3)	**ARNHEM**	CCS
4 (4)	**DOOMDARK'S REVENGE**	BEYOND
5 (6)	**REBELSTAR RAIDERS**	FIREBIRD
6 (5)	**DESERT RATS**	CCS
7 (8)	**TOBRUK**	PSS
8 (7)	**THEATRE EUROPE**	PSS
9 (10)	**BATTLE OF BRITAIN**	PSS
10 (9)	**THEIR FINEST HOUR**	CENTURY HUTCHINSON

Well surprise, surprise! Yet again The Static (sorry) Strategy Chart holds no shocks. The top four stay where they are with the rest of the chart only moving one position. What more can you say? The CRASH Readers' Best Strategy Game of 1987, Vulcan, **still holds the Number One spot for the umteenth month.**

Vulcan lover, Andrew Franks ***of Snaith Nr Goole in Humberside, scoops up the £50 worth of software available to the winners this month – listing*** *Desert Rats, Arnhem and Battle Of Britain* ***amongst his requested games. He also gets a T-shirt along with the following four runners-up.*** Malcolm Young ***from the seaside resort of Seaford in East Sussex;*** Llifon Edwards ***of Llangefni (easier to write than pronounce) in Gwynedd;*** Mark Thompson ***from Southport and*** Alan Diss ***who lives in Rubery, Birmingham.***



Hotline Top 20

1 (3)	**EXOLON**	HEWSON
2 (2)	**RENEGADE**	IMAGINE
3 (1)	**MATCH DAY II**	OCEAN
4 (6)	**ZYNAPS**	HEWSON
5 (7)	**HEAD OVER HEELS**	OCEAN
6 (5)	**GAUNTLET**	US GOLD
7 (11)	**ELITE**	FIREBIRD
8 (4)	**ENDURO RACER**	ACTIVISION
9 (9)	**MATCH DAY**	OCEAN
10 (8)	**COMMANDO**	ELITE
11 (15)	**BUBBLE BOBBLE**	FIREBIRD
12 (18)	**DRILLER**	INCENTIVE
13 (10)	**OUT RUN**	US GOLD
14 (▶)	**FLYING SHARK**	FIREBIRD
15 (12)	**STARGLIDER**	RAINBIRD
16 (16)	**MERCENARY**	NOVAGEN
17 (11)	**COBRA**	OCEAN
18 (▶)	**SUPER HANG-ON**	ELECTRIC DREAMS
19 (19)	**BARBARIAN**	PALACE
20 (13)	**PAPERBOY**	ELITE

Adventure Top 20

1 (1)	**THE HOBBIT**	MELBOURNE HOUSE
2 (4)	**SPELLBOUND**	M.A.D.
3 (3)	**STORMBRINGER**	M.A.D.
4 (7)	**THE BOGGIT**	CRL
5 (2)	**LORDS OF MIDNIGHT**	BEYOND
6 (9)	**KNIGHT TYME**	M.A.D.
7 (11)	**LORD OF THE RINGS**	MELBOURNE HOUSE
8 (10)	**HEAVY ON THE MAGICK**	GARGOYLE GAMES
9 (5)	**DOOMDARK'S REVENGE**	BEYOND
10 (8)	**RED MOON**	LEVEL 9
11 (6)	**THE PAWN**	RAINBIRD
12 (15)	**GREMLINS**	ADVENTURE INTERNATIONAL
13 (16)	**DUN DARACH**	GARGOYLE GAMES
14 (12)	**THE BIG SLEAZE**	PIRANHA
15 (▶)	**KNIGHT ORC**	RAINBIRD
16 (17)	**DRACULA**	CRL
17 (20)	**BORED OF THE RINGS**	CRL
18 (14)	**KILLED UNTIL DEAD**	US GOLD
19 (13)	**FAIRLIGHT 2**	THE EDGE
20 (-)	**SHADOWFIRE**	BEYOND

Let's hope that this month's Adventure Smashes, Jinxter and Guild Of Thieves **– both from Rainbird – have a devastating effect on the Adventure Top 20, as not much has happened in the last few months. Their CRASH Smash,** Knight Orc, **enters the chart for the first time at Number 15, with** The Pawn **at Number 11.**

The winner of fifty golden pounds worth of software this month comes from Bracknell in Berkshire (as they say on the Premium Bonds). Lucky old Graham Codd ***will be receiving a small CRASH T-shirt and games such as*** Match Day II ***and*** Combat School ***for his 128K Spectrum. The fortunate four who'll each be getting a T-shirt this month are*** Anthony Goddard ***living in Oxford;*** Paul Gifford ***of Brinkley in Suffolk; an XXL*** Sophie Sharp ***of Preston and*** Oliver Bayliss ***(he of the flamingo postcard fame) in Leatherhead.***

ROBIN CANDY'S SCORES

DEAD again? Lost that last life on the first level? Do YOU have trouble saving Earth from aliens? Well, don't despair – even losers can be winners with **SCORES**, because you don't have to be a high-score hero to get in (though it helps).

SCORES is a monthly game-by-game list showing the whole range of scores on the very LATEST games (*Jet Set Willy* record-breakers are out from the word go!).

Each month there'll be the top score so far received for each game – the first listed under the game heading – and then a couple of others, so you can measure yourself against not only interface-burners but ordinary mortals too.

And each month there'll be five winners picked at random from all the entries received, regardless of whether they're printed or not.

The first entry form drawn from the **SCORES** postbag each month will **win** £40 of software of the winner's choice **plus** a CRASH cap and T-shirt, and **four runners-up** will receive CRASH caps and T-shirts too. So don't forget to tell us on the form what software and T-shirt you'd like if you're a lucky one – because every loser can win with **SCORES**.

BUBBLE BOBBLE — Firebird

Sutinder Benipal, London N21 — 4207960
Nicholas Teills, Harrow — 2610000
Mark Thompson, Bristol — 320000

COBRA — Ocean

B Williams, Llandudno — 150060
Mark Cox, Darlington — 105000
Fred Willis, Fort William — 95300

COMBAT SCHOOL — Ocean

Kristian Gibson, Derby — 166540
Lee Thomas, Burntwood, Staffordshire — 162490
Tom Barnes, Bognor Regis — 51056

DRILLER — Incentive

Mark Thompson, Southport — 1632490
Sean Roberts, Bloxwich — 1238000
Matthew Payne, Churchdown — 379890

ENDURO RACER — Activision

Iain James Wiseman, Wooton Wanen, West Midlands — 3463561
Steven Hulse, Crewe — 2368190
Nathan Furst, Tamworth — 1852006

EXOLON — Hewson

Ben Powell, Kettering — 1544400
Robert Green, Hurstpierpoint, West Sussex — 983400
Andrew Green, Walsall — 68400

FLYING SHARK — Firebird

Simon Brown, Portsmouth — 408240
Ian Laws, Norwich — 315100
Graham Foss, Kirkcudbrightshire, Scotland — 123710

GAUNTLET — US Gold

Paul Ratcliffe, Barnsley — 16911194
Andrew Quick, Talbot — 12978252
Clive Murray, Eastbourne — 3386534

IK+ — System 3

John Hicks, Warrington — 164500
James Sammon, Bradford — 52200
Wayne Rogers, Southampton — 50683

OUT RUN — US Gold

Steven Hulse, Crewe — 34755590
Richard Booth, Mirfield, West Yorkshire — 32963690
Michael White, Salisbury — 1273620

RENEGADE — Imagine

Val Cookson, Preston — 1114950
Louis Wilcox, Wooburn, Buckinghamshire — 1004950
Paul Knott, Harborough — 172750

STAR WARS — Domark

Paul Hadfield, Bolton — 100570050
Simon Lennox, Castledowson, Co Londonderry — 1577132
Mark Lawton, Stoke-on-Trent — 1328249

SUPER HANG-ON — Electric Dreams

Robin Cavill, Dewsbury — 12001760
Daniel Goulden, Reading — 516000
Nick Drewett, Bushey — 341008

THUNDERCATS — Elite

Simon Ashe, Andover — 192000
Andrew Waring, Chester — 72505
Jonathan Roy, Glasgow — 24700

ZYNAPS — Hewson

Andy Lowe, Stoke-on-Trent — 185100
James Watson, Dover — 140500
Imran Rasul, Hemel Hempstead — 40100

WINNERS

Mark Chappell of Northope in Lincolnshire wins £50 worth of software (he sent his scores in on the special Golden Issue form) including *Firefly*, *Platoon*, *Scumball* and *Northstar* – and, of course, a CRASH cap and T-shirt.

Runners-up, each getting a CRASH cap and T-shirt, are **Simon Brown** of breezy Southsea in Hampshire, **Matthew Wright** of Witham in Essex, **Stefan Ratcliffe** of Battersea (where even the dogs read CRASH), also in Essex, and **Brendan Fanning** of Oldham in Lancashire.

Remember – *any* score sent in to **SCORES** can win you a prize.

SEND ME YOUR SCORES

Send this form (or a copy) with your scores for up to three games to **ROBIN CANDY'S SCORES, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB***. Only genuine scores will be accepted; any improbably huge scores will be immediately binned and the sender will be forced to listen to Lloyd Mangram – a fate worse than sharing a desk with The Art Of Noise.

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	GAME	SCORE	DATE ACHIEVED
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2			
3			

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CHAMPIONSHIP SPRINT

Producer: **Electric Dreams**
Retail price: **£9.99**
Authors: **Catalyst Coders**

Ever fancied roaring around a racetrack at high speed? Standing on the winner's podium with a bottle of champagne in one hand, and a blonde in the other? Well in this game, the player at least gets to try the racing bit. Converted from the Atari coin-op game, *Championship Sprint* gives one or two people the chance to test their driving skills on a Grand Prix racetrack.

Initially, participants are given the choice of either racing on a standard track or on one of their own design, created using the track editor which is included on the flip side of the tape. The program then prompts for the number of players and their chosen control method (joystick or keys). Once this is set, the course itself may be selected from one of eight tracks.

The game starts with four cars sitting abreast of the starting grid. The flag drops, and they're off! Human drivers compete against computer controlled opponents and attempt to finish first over each three-lap race. Not only having to contend with their digital adversaries, there are also hazards on the track: oil, water, gravel, and a baby whirlwind do their best to send the player spinning off the road. However, help is at hand in the shape of gold spanners: collecting four of these endows the player's car with useful bonus extras for the next race, such as turbo boost and higher top speed. At the end of the current race the cars are shown in the pits, along with their placings, scores, and best lap times.

If in a particularly creative mood, the player can use the construction set to design devious tracks to delight or annoy friends. Selections are made by clicking the cursor on a series of icons placed along the right-hand side of the screen. These allow the user to view the segments of track that are used to create the course, select obstacles to place in the drivers' way and check a finished track for faults. Once completed, tracks can be saved to tape for posterity.

► Ready and steady but no go

CRITICISM

● *" And they said* Super Sprint *was bad! Additions there may be, but improvements they aren't. My main gripe with both the Sprint games is the appalling collision detection. The track may be drawn to look smooth and circular, but if you actually examine the limits by banging into the sides of the track you'll find it blocky – in other words somebody couldn't be bothered to use pixel collision detection and settled for the easier, and less accurate, character detection. If this aspect of the game wasn't so infuriating then it could be mildly addictive. One of the plus points is the track designer: it should lengthen the lastability by a few weeks – if you can be bothered to load the editor, design your track, save your track, load in the main game and then load in your saved track (phew)! "*
PAUL

● " It was enough to have to put up with the tiny graphics and irritating gameplay of the original **Super Sprint** but to stand another dose of the same, well it could be fatal! (To the enthusiasm, at least) The only aspects that cheer up the game are the vaguely decent pictures of racing cars in between courses. **Championship Sprint** suffers terribly from colour clash which makes the potentially rubbish graphics even worse (if that's possible), and gives the game a generally untidy feeling. There are no sound effects or tunes, which all detract from a generally uninteresting, unimaginative game. If I didn't know any better, I would think it was budget game; it's definitely not worth the £9.99 asking price! "
NICK

● **" I've never been a great fan of racing games, and often find that I spend more time off of the track than on it. This was the case with** Championship Sprint: **control of the car seemed very loose and 'soggy'. Aggrieved by the faultless performances of**

PREDATOR

Producer: **Activision**
Retail price: **£9.99**
Authors: **designed by System 3, programmed by Source**

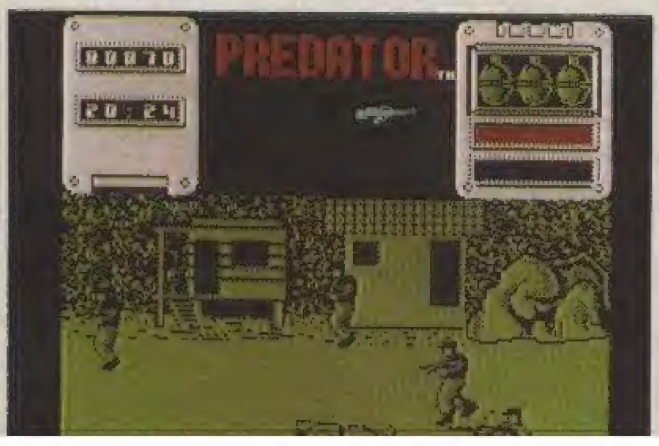
It's a typical Arnold Schwarzenegger role, familiar from *Conan The Barbarian*, *The Terminator* and *Commando*: and it's the same all-action Arnie who stars in 20th Century Fox's recent movie *Predator*, closely followed by System 3 for this licence.

The game starts as Major Alan Schaefer (Schwarzenegger in the film) and his small force of mercenaries rope-slide from a hovering helicopter and begin their hunt for missing VIPs in a dark, uncharted jungle.

Schaefer is the last to make it into the undergrowth. He finds the VIPs' crashed chopper with no survivors – yet no bodies either.

Then he realises his team has vanished – but as he moves further into the jungle's depths, he discovers his fellow mercenaries one by one, mutilated and very dead.

Armed with grenades and a powerful machine gun, Schaefer runs through the horizontally-scrolling jungle setting, using all his wits and weapons to survive guerilla ambushes and the attacks of vultures. He can soon find other weapons, obviously dropped by his murdered colleagues – and though they're helpful, an uneasy feeling starts to roll around in the back of Schaefer's mind.



NICK

" Predator is mostly a waste of time: after just one go I could get through levels 1 to 4 by simply running along and hardly shooting a thing! There are some excellently-designed backdrops, and some tough enemies, but the terrible colours spoil things all the way – on some levels you find yourself chased by a box of chocolates. And the 'horribly mutilated' victims of the eponymous predator are nowhere to be seen.

Using joystick you can't throw a grenade or pick up a weapon, and to add confusion to difficulty the inlay is very unhelpful; instead of telling you straight what you've got to do it consists of obscure hints and tips.

Predator's a good idea for a licence, and there are a few powerful graphics. But the best entertainment you'll get out of it is reading the atmospheric blood'n'guts talk of the inlay! "

PAUL

" The movie is atmospheric and frightening, but the only part of the Predator game with any suspense is the inlay – well-written, but not very helpful.

The loading technique is a farce. First you have to load an unimpressive demo, then you have to load in each play area (and none seems very different from the others), and finally you have to rewind the cassette back to the first level (situated 'somewhere' in the middle of the tape – the game is to find it)!

When everything's finally loaded you're subjected to a 10-second opening sequence (every time you play) and then hidden behind it all is . . . the game.

Predator has few addictive elements – the basic 'get them before they get you' instinct is the obvious one – and though the graphics hold it together for a few games, when their appeal has worn off you're left with a very boring, repetitive and infuriating piece of software. "

Schaefer had been briefed to expect guerillas, and they can be disposed of quickly with his scalpel-sharp reflexes and

the computer controlled cars as they zoom around the track, I soon found that the game bored me to tears. Graphically, it's okay: the track and backdrops are all quite nicely drawn, but the cars themselves look a little crude and simplistic. The construction set is a nice idea, but even with the facility to design a track, I feel Championship Sprint **won't hold your attention for very long. "**
MARK

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: a large range of sections allow many varied tracks, although the individual segments are simply drawn
Sound: appalling. No tunes and few spot effects
Options: definable keys, track construction set and one or two players
General rating: at a penny under a tenner *Championship Sprint* is very bad value – even with a track designer

Presentation	58%
Graphics	44%
Playability	44%
Addictive qualities	41%
OVERALL	**44%**

ruthless firing. But can the horribly mutilated bodies of his colleagues really have been the work of guerillas, or is there something far more mysterious and malevolently powerful lurking in the jungle?

To reinforce this notion, a telltale triangular laser sight occasionally appears and tracks Schaefer . . .

If he survives long enough and beats the countdown clock, the mercenary leader might find out – and use all his military skills and power to destroy the sinister creature, the strange alien predator in the jungle.

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: superb character-animation, but a poor 3-D side view of the action
Sound: the meagre 'Schaefer running' sound is out of sync with the sprite's movements – hardly scary
Options: two keyboard layouts
General rating: if only the game lived up to the inlay . . .

Presentation	72%
Graphics	75%
Playability	66%
Addictive qualities	58%
OVERALL	**68%**

IMPACT

Producer: **ASL**
Retail price: **£9.95**
Authors: **Steven Tucker**

Long ago, shrouded in the mists of time, there was an arcade game called *Breakout*. This game was so popular that it spawned a long line of imitators, the latest of which is ASL's *Impact*.

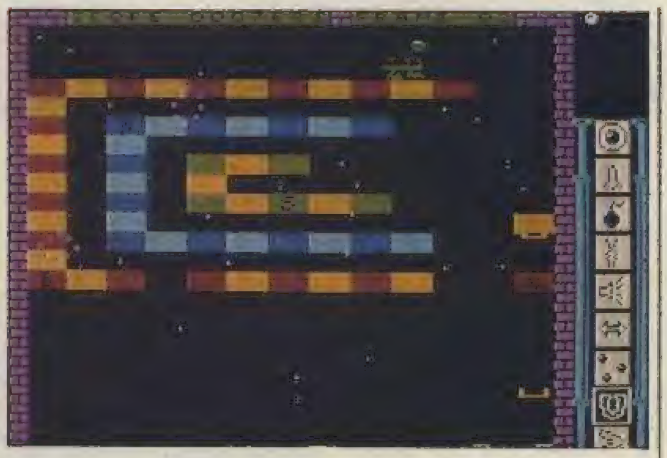
Following in the normal *Breakout* gameplay, the player faces 90 screens to be conquered by demolition. 80 are preset, while the remainder are user definable, allowing the player to create screens of his own design.

The majority of bricks only need a single hit to destroy them; others need several; some are indestructable, and to make the situation even more confused, some screens even contain invisible bricks.

Wandering aimlessly around each screen are small aliens, which are destroyed on contact with the bat or ball. Although these aren't harmful themselves, they occasionally release small white bombs which incapacitate the bat momentarily on contact, enabling the ball to escape off-screen and losing the player a life.

When hit, some bricks release yellow tokens which can be used to purchase one of nine pieces of equipment to aid the player in his task. These include slowdown, to reduce the speed of the ball, a torch to light up invisible bricks and lasers for wholesale destruction. Nine icons lie down the right-hand side of the screen, each corresponding to the available items. A black square highlights the currently affordable item and as tokens are gathered the square advances accordingly. If any tokens remain unused at the end of the level, they are converted into an end-of-level bonus.

Five lives are provided at the start, with an extra bat being earned every 50,000 points. On some screens a bonus is attained by destroying in sequence, bricks marked with the letters BONUS. However, hitting them in any other order doesn't gain the player a bean.



► **Less of an impact on the Spectrum**

PAUL

" The attraction and addiction of simplistic graphics and elementary gameplay has been no more evident on computers than in the implementation of Breakout **on the Spectrum. It's very easy to criticize games of this type (especially** Impact**) for their uninventive use of the display area and meagre tunes created in what is essentially an easy game to program. You can't deny their addictiveness but, nevertheless, I am appalled to see ASL charging the extortionate (there's no other word for it) price of ten pounds for such a simple game. So you get a designer – but what use is that if you have very few options in the game anyway! Batty and** Arkanoid **still tussle for the top of the block-bashers purely for their inventiveness and expansion of a very old and lucid concept. "**

MARK

" As with most Breakout**-type games, the first thing that goes through your mind is, 'Does this game offer anything new to the old tried and tested formula?'. Well, although** Impact **is a graphically competent game, with some nicely drawn screens and a zippy little ball springing about, there sadly isn't anything new or exciting enough to set it apart from the crowd of other variants. Saying that, I did enjoy playing the game for quite a while, but I feel that as there are so many games of the same type around, you may already have one better than this.**

KATI

" Impact, the publicity claims, is all set to hit your screens with a bang . . . a whimper would be more appropriate. The presentation and gameplay are polished but not outstanding; the graphics are colourful and the sound is adequate. Gameplay is addictive (isn't it always) and if you get bored of trying to master 80 screens there's always the construction set. The idea of catching credits to buy a limited variety of bonus features is new but doesn't really add much interest to the game. There are no unexpected transformations of bat and ball as you flit boldly across the bottom of the screen collecting bonuses. More annoying is the disintegration of the bat before it becomes clear that the ball isn't going to hit it: the computer is always *just* ahead of the graphics. If you're addicted to this sort of game then the construction set makes it an worthwhile addition to your collection. For dabblers in the genre, though, it doesn't offer anything special enough to rate as an investment. "

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: little imagination shown
Sound: inexcusably poor
Options: ten user-definable screens
General rating: the genre may be old, but there's no lack of scope

Presentation	59%
Graphics	40%
Playability	64%
Addictive qualities	66%
OVERALL	**60%**

XARAX

Producer: **Firebird**
Retail price: **£2.99**
Authors: **R Spahl and T Gittelbauer**

The salvation of the world is at stake. No time for preliminary explanations; just strap on a helmet, climb into a flying suit and embark on a bombing run over enemy territory.

The display gives an aerial view of the player's spacecraft flying over the vertically scrolling landscape of land and sea. Attacking alien vessels move in from the top of the screen, and ground bases fire from below. The player's ship is equipped with laser fire to combat airborne enemies and bombs to destroy ground bases. A target constantly superimposed on the screen indicates where the bombs fall.

A colourful panel to the left of the action informs the pilot of his score and the number of lives left. Outstanding performance is rewarded by an extra life every 10,000 points.

KATI

" Shoot 'em ups hit the software shelves with monotonous regularity every month and Xarax doesn't stand out from the crowd: it's just a competent, rather unexceptional game. Bombing and blasting is moderately exciting at first, growing challenging as the gameplay progresses and finally becoming a tedious and repetitive chore. This is aggravated by the fact that enemy fire is difficult to see. If you want to while away an afternoon with some fairly conventional shooting then Xarax should fit the bill. "

NICK

" I remember when it was a pleasure to play a Firebird game because they were all original and fresh; Xarax is merely a mixture of old ideas. The tune doesn't flow properly and the layout and idea have been stolen from Mirrorsoft's Moonstrike. Despite this, the game is neatly set out and the graphics are reasonably clear. Colour is used well on the borders but is a bit lacking in the game itself, which eventually becomes just a matter of remembering the attack waves. "

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: as with most games of this genre the monochromatic backgrounds make the bullets hard to distinguish
Sound: repetitive tune
Options: definable keys
General rating: in a market full of monochrome vertically scrolling shoot 'em ups, *Xarax* is easily forgotten

Presentation	54%
Graphics	54%
Playability	52%
Addictive qualities	49%
OVERALL	**52%**

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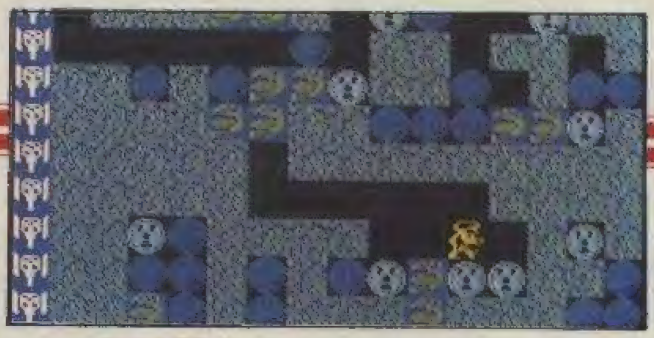

Producer: **MAD X**
Retail price: **£2.99**
Author: **Fernando Herrera**

It's four years since his last adventures but Rockford, hero of *Boulderdash* and *Rockford's Riot*, has returned in the conversion of his own arcade machine.

The game consists of five worlds which are accessed individually and carry their own different themes. Each has four levels, and comprises an underground landscape of boulders and strange inhabitants. The object of the game is to tunnel past the precariously balanced boulders in order to collect a specified amount of hidden treasure within a given time limit.

Each location has its own unfriendly natives and while all cause death on contact, some explode, when strategically squashed, to create more treasure.

If Rockford's task becomes too exhausting, the player can always try playing *Rockman*, a platform game featured on the reverse side of the cassette and which scored 69% when it was first released in 1986.

KATI

" The new features in Rockford **prevent it from being just a simple** Boulderdash **clone. Such a lot of attention has been put into the presentation, though, that it's a pity the game falls down on technicalities: the scrolling is jerky and the controls are sometimes insensitive. These were problems in the original** Boulderdash **and instead of improving they seem to have become worse. These niggles don't completely spoil the gameplay but they do contribute towards making** Rockford **an average budget game instead of quite a good one. "**

MARK

" I've always been a great fan of the now-aging Boulderdash **and while some of the monsters from that famous game rear their ugly heads here, there are many new features and fiendish screen designs. Graphically the game is quite good, being bold and colourful, although Rockford himself does tend to look rather small and splodgy. Not 'The ultimate version of Boulder Dash' as it claims on the inlay but a pretty decent imitation. "**

NICK

" The graphics on Rockford **might have been passable in the days of the original** Boulderdash **(Crash issue 12) but now they're only to be laughed at. The animated characters and colour haven't been changed, and the only real game differences are a 128K tune plus new screens. Despite the amateurish graphics the playability and addictive qualities are still there, though, and with the inclusion of** Rockman **it may be worth a look. "**

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: colourful but dated, with jerky scrolling
Sound: insignificant title tune and spot effects
Options: definable keys, one or two players
General rating: an old game showing its age. The free game, *Rockman*, hardly furthers its cause!

Presentation	56%
Graphics	54%
Playability	59%
Addictive qualities	59%
OVERALL	**57%**

KARNOV, THE 'WELL-KNOWN' FIRE-BREATHING RUSSIAN, IS RUNNING, JUMPING, CLIMBING, SWIMMING AND FLYING AFTER THE LOST TREASURE OF BABYLON. COUNTLESS WACKY MONSTERS ARE OUT TO STOP HIM . . . EVER SNUFFED IT AT THE HANDS OF A SKELETON ON AN OSTRICH? INCORPORATING NINE LEVELS OF GAMEPLAY, KARNOV IS A VAST 4 WAY SCROLLING GAME THAT COMBINES BOTH STRATEGY AND FAST ACTION AND IN WHICH THERE ARE MANY ROUTES TO SUCCESS.

Spectrum screens shown.

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ELECTRIC DREAMS

DATA EAST

Your Sinclair

IKARI WARRIORS

Producer: **Elite**
Retail price: **£8.99 cassette, £12.99 disk**
Author: **David Shea**

A band of revolutionaries have stormed the jungle HQ of General Alexander Bonn, and are holding him hostage. Unknown to the guerrillas, however, he managed to send a mayday message before being captured. On hearing of this the Ikari Warriors are rushed to the scene to attempt a daring rescue.

Unfortunately the warriors' plane crashlands some distance from the planned lz and the two surviving warriors are faced with a trek through dense jungle in order to rescue the General. From here, the mission may be undertaken as a solo venture or with the help of a friend controlling the second mercenary.

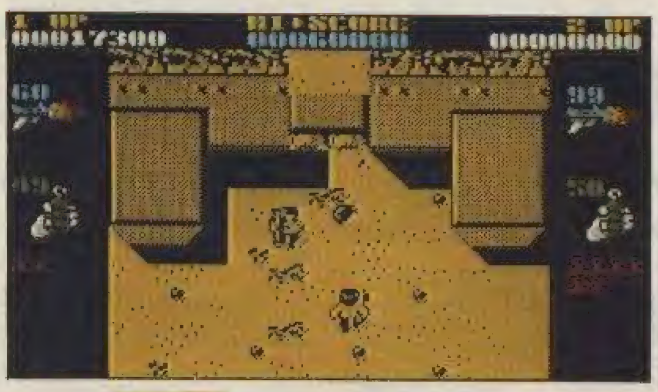
As the intrepid soldiers yomp through the vertically scrolling landscape, they are attacked by squads of enemy marksmen and combateers. Equipped with a limited supply of ammunition, grenades and only six lives each, they go about cutting a swathe through the enemy ranks. As the baddies are decimated, the occasional bonus tile appears, bestowing such goodies as additional ammo, extra grenades and fuel for the enemy tanks that are to be found at certain locations.

Boarding these tanks allow the players to provide themselves with some protection and, more importantly, extra firepower. Enemy soldiers who get in the way are squashed and the large gun emplacements – which can also be removed by a well placed grenade – are despatched with relative ease. However, land mines and grenades are more dangerous: contact with these sees the tank bursts into flame along with its passenger.

The Ikari Warriors' mission ends only when their last life has faded away, or when the HQ is breached and the General escorted to safety.

MIKE

" The release of Ikari Warriors **has been eagerly awaited by the games playing fraternity for quite a while, and the question is, 'Is it any good?'. The answer: Well I like it, at least! There have been a lot of examples of this vertically scrolling 'massacre the enemy' style of game since the release of the classic** Commando **a couple of years ago but** Ikari Warriors **carries on the tradition in fine style. Graphically the game is good, with some very** Ramboesque **main sprites charging around causing widespread carnage. I particularly liked the tanks which our warmongering friends can use to explosive effect. Overall, a great game in the classic** Commando **mould. "**

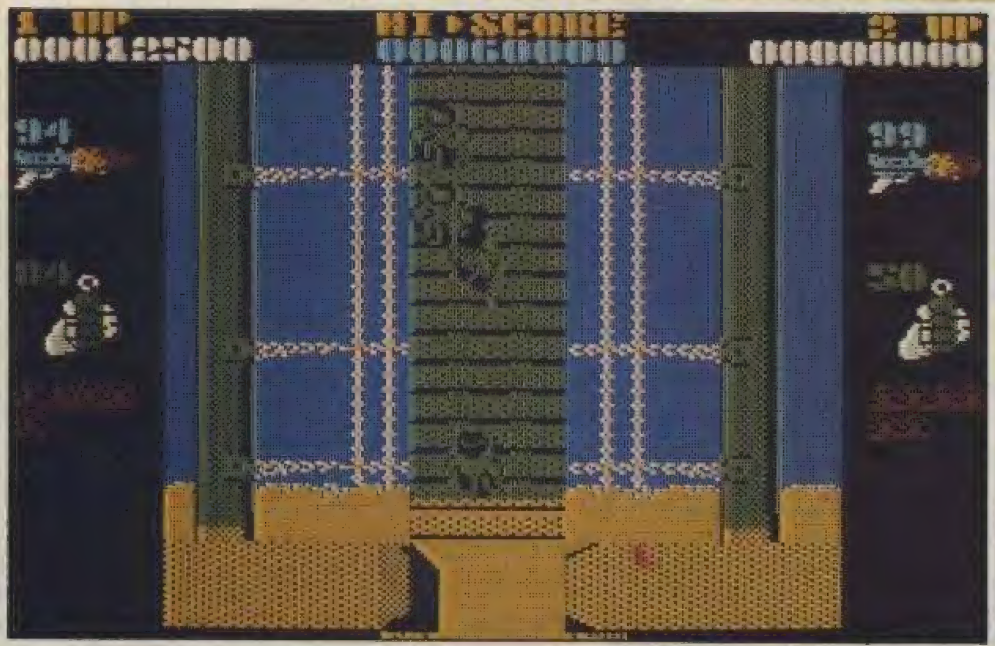


NICK

" Yes it's Ikari Warriors**, the game that seems to have been years in the making. Is it really just a full priced** U.C.M.? **Well the graphics are close, the layout is similar and the idea is almost identical, so the answer must undoubtedly be 'Yes'. It seems that this game has suffered in the same way as games like** Knight Rider **and** Scooby Doo **did. They have just taken so long to write that the initial expectation wears off by the time they appear.** Ikari Warriors **has a nice tune at the beginning and there are a few nicely detailed screens further up the scrolling landscape but that's about it. There are problems with colour, as per usual, but they can't be helped. It may be worth buying this just in curiosity but I can't really recommend it. "**

KATI

" The long awaited, much anticipated Ikari Warriors **has finally negotiated the conversion from the arcades. Graphically it has survived the inevitable loss of colour content and detail; the landscape is well defined and retains the boldly contrasting features of the original. Crashing fiercely through the undergrowth, dodging bullets, hijacking tanks and hurling grenades are mercenary pleasures which never seem to pale. Failed missions are sufficiently frustrating to keep hardened guerilla fighters charging back for more. A minor drawback is the inadvertent camouflage of some of the enemy fighters; being zapped in the back by what looks like a harmless piece of vegetation can be infuriating at moments of strategic tension. Vigilant warriors are unlikely to be troubled by this and who cares when you've got the crucial elements of an arcade game in the comfort of your own home. "**



COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: the constant scrolling keeps the action coming thick and fast
Sound: rough and tough tune, but feeble effects
Options: Kempston mouse, one or two players
General rating: if *Ikari Warriors* had come out when it was first advertised it would have been an amazing success – however much more is needed nowadays

Presentation	85%
Graphics	77%
Playability	74%
Addictive qualities	76%
OVERALL	**76%**

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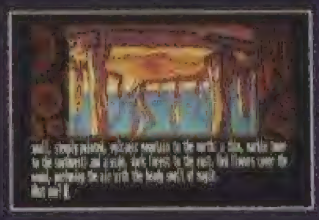

Screen shots from Atari ST version

What the press have said:

LORDS OF TIME: ***"Destined to become a classic"*** – *Computing with the Amstrad.*

RED MOON: ***Best Graphical Adventure or Best Adventure of the Year*** – *Zzap 64, Crash, Amtix, C&VG, CCI, and Amstrad Computer User.*

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ARKANOID – REVENGE OF DOH

Producer: **Imagine**
Retail price: **£7.95 cassette, £14.95 disk**
Author: **Mike Lamb**

As everyone knows, 40,000 years ago the Arkanoid Space Wars liberated the universe from the tyrannical dimension controller DOH. Now, having regained their strength, the aliens are making a comeback. DOH has metamorphosised into an even more venegeful form and is hiding out in the space ship Zarg. Taking control of the spacecraft Vaus II – a modified version of the original – the player must penetrate the enemy ship and exterminate the alien invader.

The Zarg consists of a series of rooms comprising various multicoloured arrangements of bricks. These structures are broken down by an energy bolt deflected off the surface of the Vaus as it manoeuvres deftly from side to side. Different bricks have varying levels of resistance: some must be struck a number of times before they can be destroyed, while others disappear momentarily only to regenerate; only a few are indestructible.

Each room contains a generator which releases a constant stream of hostile alien life forms. These spinning, bouncing and revolving creatures variously obstruct and aid the movement of the ball. Their determined descent towards the base of the screen comes to a swift and sticky end on contact with the valiant Vaus, which remains impervious to their touch.

The destruction of specific bricks triggers the release of a variety of different energy capsules. Identified by their lettering, these have the power to transform the molecular structure of the Vaus on impact. The dextral skill of the player determines whether the spacecraft spawns a twin, is shadowed by a ghost, doubles in size, assumes extra weapons (laser power, smart bombs, extra energy bolts), flies against a scrolling backdrop or shrinks to a fraction of its size. Special capsules also inject random factors into the game . . .

A screen display shows score and current level. Generally, to progress from one level to another the screen must be cleared of destructible bricks. Occasionally, however, capsules are released which bear a warp, allowing the player instant access to the next round.

KATI

" The Revenge of Doh is a very professional rendering of the ageing Breakout theme. The graphics immediately catch your eye: all the backgrounds are textured and the arrangement of bricks on each screen seems to make use of more colours than the Spectrum actually has to offer. Gameplay is smooth, having none of the problems with random speed changes typical of the original Arkanoid, and collision detection is accurate. The variety of capsules ensures that play is different enough to charm the most reluctant addicts, especially with the element of random bonuses thrown in. One minor drawback is the colouring of the bat: it's always the same as the background and unintentionally camouflaged. In the long run, this is just a small hiccup in an extremely slick and well presented game. "

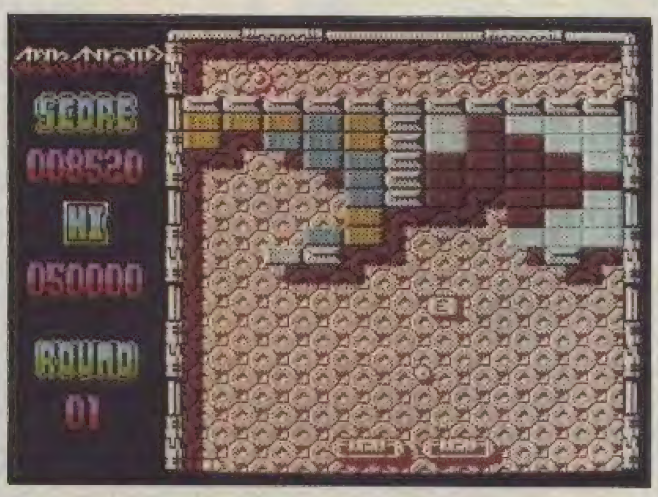
MIKE

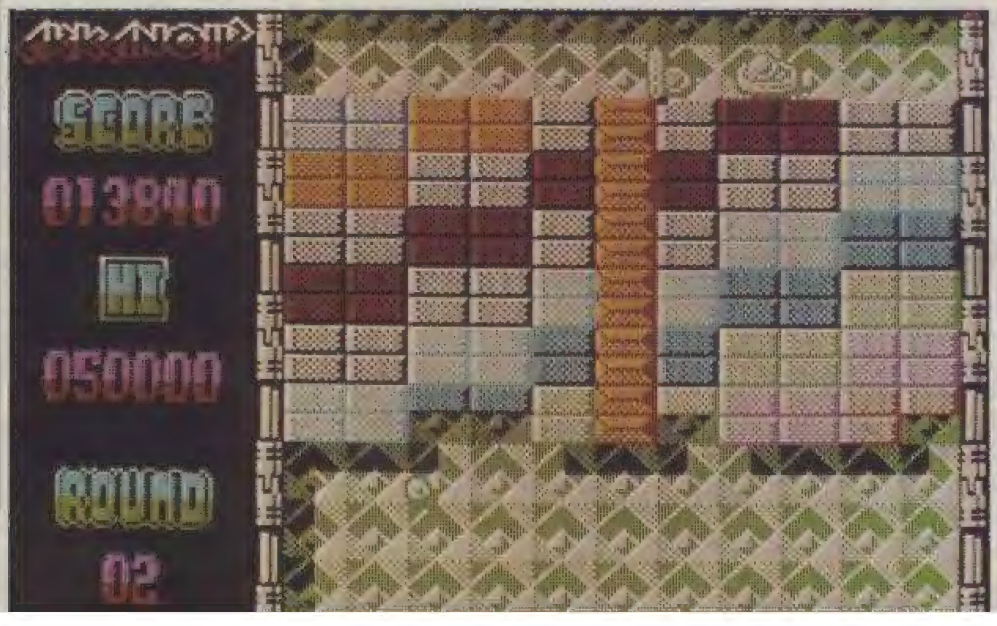
" Arkanoid is the second of the Breakout-style games featured in this month's magazine, and is in my opinion by far the best of the two. Graphically the game is great, with a very fast and realistic ball being bounced around some very clear and subtly coloured screen designs. Sadly, though, I do have a very minor gripe, in that on some of the paler screens the bat tends to get lost in the background. This is a little disconcerting, and a lot of concentration is needed to keep one eye on the bat, and the other on the ball. As I said though, this is the only slight blemish on an otherwise enormously enjoyable game; definitely one for all Arkanoid fans. "

NICK

" The Revenge of Doh is just another run of the mill bat 'n' ball game. There are so many similar games on the market that nobody really takes any notice of them any more. The graphics are excellently drawn and would look fantastic on screen if only they were against a black background. But with a highly complex background – which is the same colour as the bat and ball – you soon lose track of what's happening and die. On the first couple of goes the little tunes and jingles are very inviting and add to the atmosphere of the game, but after the tenth go they start to get irritating and you feel like kicking the monitor in! I feel sorry for people who own one of the older Spectrums because they can't even pull the sound socket out! Personally I don't think this game will do very well because of all the similar games that are around, but for all fans of the original Arkanoid it should be worth a whirl. "

► **Immensely playable and surprisingly addictive**





COMMENTS

Joysticks: Sinclair
Graphics: superbly colourful and very varied
Sound: tinny on the 48K, repetitive and monotonous 128K title tune
General rating: there's even progress in the *Breakout* world – *Revenge Of Doh* proves it!

Presentation	78%
Graphics	85%
Playability	80%
Addictive qualities	83%
OVERALL	80%

DEMON'S REVENGE

Producer: **Firebird**
Retail price: **£1.99**
Authors: **Probe Software**

Merlin Jnr has been left to tidy up his master's castle. Renowned for his clumsiness, it's not long before he releases the four talismen of Trodor the Demon. Now the evil one's power is free to roam the castle and the only way to prevent disaster is for Merlin Jnr to restore the talismen to their rightful place. Each charm is split into four segments, which must be returned whole to one of the castle's four temples.

Numerous demons traverse the chambers, and contact with these causes the player to lose energy. However, finding a pentangle restores Merlin Jnr's flagging spirits. Although initially defenceless, Junior is able to hurl bolts of mystic energy at the baddies once he has found the two spells which enable him to do so.

Objects vital to the success of his mission include two keys – one allowing access via the wooden doors of the castle, the other opening the metal doors of the dungeon.

CRITICISM

● " Just because games are released at a budget price, some software houses see it as a good excuse to churn out their worst programs. Okay, *Demon's Revenge* isn't totally naff, but it's nearing the bottom of the barrel. Graphically the game is okay but the nasty demons are rather simplistically drawn – especially the skeletons, which hobble around in an amusing way. This very simple collect 'em up failed to hold my attention for any length of time. "
MARK

● " **Sorceror's apprentices are traditionally dogged by bad luck. Merlin Jnr also has the misfortune of appearing in a fairly insipid adventure. The graphics are finely detailed and create a grim atmosphere, but they can't compensate for bland and bungled gameplay. The instructions are a feeble attempt to make sense of a completely illogical system. Pressing the keys to select and drop an object variously causes the inventory to swap items around, drop something completely different, or place the desired object in a totally undesired place. Irrational and thoroughly unaddictive.** "
KATI

● " *There is so much wrong with this game: the characters are badly defined, monochrome sprites that move across the screen in jerky diagonals. The spot effects are just basic beeps and there is no tune whatsoever. None of the monsters look menacing and they only kill if you stay in one place for about five minutes! The idea of collecting objects isn't exactly new, and since they don't have any effect on what your character can do, it seems a total waste of time.* "
NICK

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: the main perspective appears successful, but when the characters begin to move within it the game falls apart
Sound: very basic and lacking a tune
Options: definable keys and three levels of difficulty (Easy, Hmm . . . and Heavy!)
General rating: poor enough to give budget games a bad name

Presentation	53%
Graphics	50%
Playability	29%
Addictive qualities	30%
OVERALL	**32%**

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BEDLAM

Producer: **GO!**
Retail price: **128K ONLY £8.99 cassette, £12.99 disk**
Authors: **Beam Software**

It takes many years to train a cadet in the Steller Imperium's pilot academy, and at the end of that time they very often feel that they're ready to face anything. To keep them in their place, the instructors devised one last test: the X12 fighter simulator, aptly nicknamed 'Bedlam'.

From the title screen, *Bedlam* offers both a one player game, plus a dual player mode in which two pilots are given the chance to co-operate in killing the aliens or, if they feel particularly mean, trying to kill each other.

There are 15 space stations, ten moonscapes and four pinball tables to breach before the budding cadets can earn their wings. Space station surfaces are immediately difficult to negotiate since they are bristling with radar installations, guns, and missiles. Further opposition is then provided by aliens vessels which swarm at the player's craft in large formations. These are shot to award the player a hefty bonus, but collision with enemy fire and static targets proves fatal to the ship, three of which are provided for the mission.

To aid in the task, there are useful items scattered around the screen: flashing diamonds are destroyed to uncover hidden objects, including extra firepower, additional lives and shields, while collision with a teleport symbol warps the player to one of the game's four pinball tables. The aim here is to gain as many points as possible, and hitting either a X2 or a X10 scoring amplification factor is the ultimate goal since the player's score in the main game is briefly multiplied by the relevant amount.

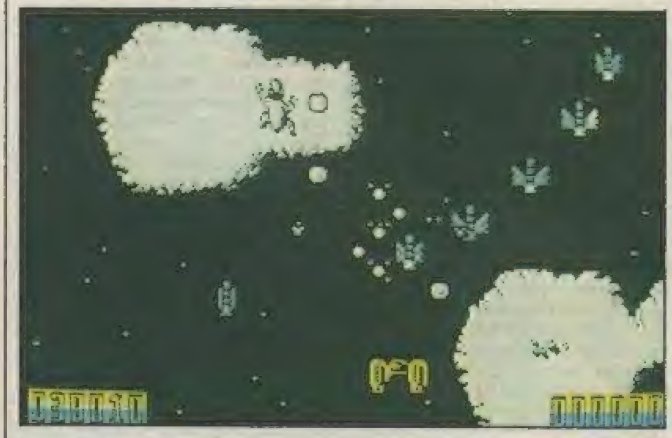
Also making their presence felt are large alien motherships. These heavily armed and armoured craft can be destroyed for bonus points and a very welcome shot of invincibility, although each time they are destroyed they become more powerful on their next visit.

MARK

" Bedlam is a very apt name for this game, as complete pandemonium breaks loose about the poor old player's ears. Graphically the game is very good, with some nicely drawn alien battle formations zipping around equally well drawn and solid looking backdrops. One feature I particularly like is the bonus pinball tables that crop up every now and then. These not only look nice, but play just like a the real thing, the ball spinning around the screen in a very realistic manner. Playability is high from the start, as huge formations of mean and bloodthirsty aliens charge down the screen after your blood. Add to that the great pinball tables, and you have a very enjoyable game. In my opinion, Bedlam is well worth the asking price. "

KATI

" Bedlam is an impressive game to look at: the graphics, particularly in the pinball bonus game, are colourful and have some interesting features. The gameplay, with unsuspected dangers lurking everywhere, is also unusually varied for a shoot-'em-up; by introducing motherships, magnetic force fields and pinball games, the programmers have obviously tried to create something out of the ordinary. Unfortunately the action isn't quite fast enough to make the most of all these features. Control of the spacecraft is sluggish (you always seem to be forcing the joystick) and as a result the game lacks a compulsive edge. Hardened blasters probably won't find this a drawback; others should think twice before releasing their cash. "

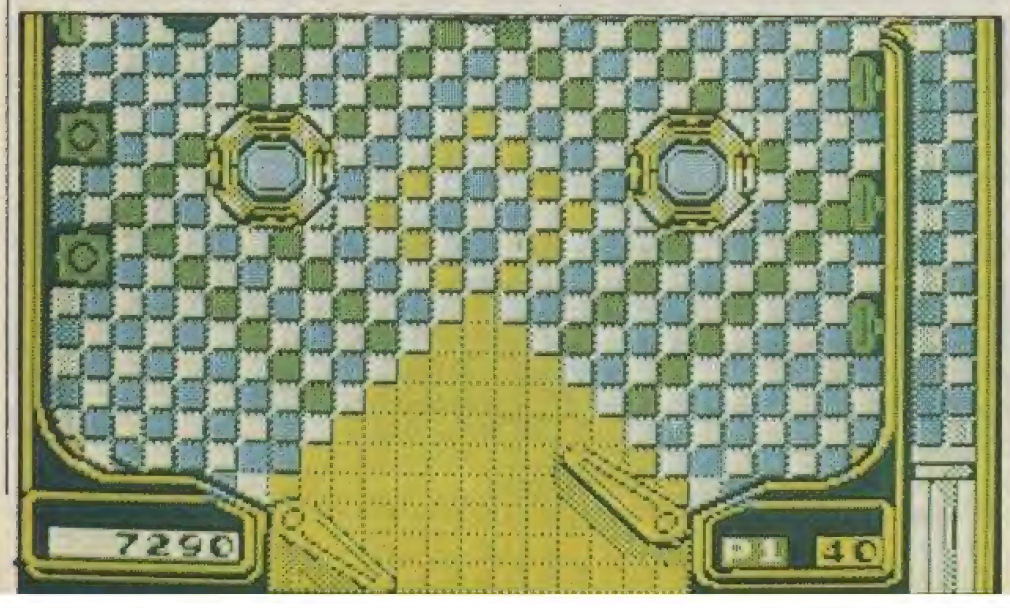


► 'GO!'s best release yet'

PAUL

" Now this is more like it. Just lately, products coming out of the GO! offices have been disappointing to say the least, but by all accounts Bedlam could be the game to turn GO! around. Although coming from the same family as Slap Fight, Flying Shark and every other vertically scrolling variant, Bedlam has one great difference – it's NOT monochrome! Gone are the frustrating shouts of, 'What hit me?' and 'I couldn't even see that!'. The technique may be old, dating all the way back to Lightforce, but I don't think I've seen it implemented in such an impressive way before. Bedlam sure is what the title suggests: constant action all the way through with hardly any hold-ups. Its only flaw is that the game tends to speed up and slow down in unison with the amount of enemies on screen. If all you want is basic blasting fun then Bedlam could be the one for you. "

► 'Colourful and interesting features'



COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: all the colour without the clash, made frantic with some fast animation and scrolling
Sound: average spot effects and poor tune
Options: definable keys and one or two players or two players simultaneously
General rating: probably GO!'s best release yet. The sequential and dual play options add longer lasting appeal. Sadly, ONLY on the 128K Spectrum

Presentation	76%
Graphics	77%
Playability	73%
Addictive qualities	75%
OVERALL	**75%**

BASKET MASTER

Producer: **Imagine**
Retail price: **£7.95**
Authors: **Dinamic**

Cynics may call it just an American version of netball, but basketball is fast, furious and athletic – and Spanish programming house Dinamic will have you jumping through hoops in *Basket Master*, CRASH's favourite basketball simulation so far.

At each end of a basketball court is a netted hoop, and players attempt to throw the basketball through the other side's hoop (a goal, in effect). Two points are awarded for each successful throw or 'basket', and an extra point if the throw is made from outside a marked arc.

Five players make up a basketball side, but *Basket Master* has been simplified to have just one on each side, and there are three skill levels to choose from: beginner, amateur, and NBA (America's National Basketball Association is the sport's main organisation).

Playing against the Spectrum or another joystick-wielder, you can move in any direction and dribble with the ball to keep it away from the opposition. Players try to steal the ball by constantly pressuring whoever's carrying it and snatching it as soon as it's not protected by his body; *Basket Master* helps by indicating onscreen when it's the perfect moment for a steal.

And players can always intercept the opposition's shots toward the basket.

Throws at the basket can be made in various styles, ranging from the sky-hook to the spectacular slam-dunk, which can only be made from the zone directly beneath the basket and requires much more energy than other shots. A successful slam-dunk is followed by a slow-motion action replay with enlarged graphics for you to glory in or wince at.

After a basket has been scored, the ball passes to the other side, which must then bring it forward from its own basket.

Basketball is meant to have no physical contact, but sometimes when the pressure is on things can get out of hand. Barging into an opponent can result in a personal foul; each player is allowed only five fouls, and loses the game if he commits a sixth.

The time remaining in each half is shown beneath the main screen, and when the half ends there's a breakdown of baskets scored, shots taken, free shots made, and fouls committed.

Previous basketball games include Imagine's own *World Series Basketball* (Issue 23/81%), Gamestar's *Championship Basketball* (Issue 44/37%) and Ariolasoft's *One On One* (Issue 21/39%). Incidentally, cynics still reading should note that basketball was invented in 1891 – a year *before* netball, which was also originally American!

NICK

" I never was any good at basketball, and it shows when I play this – whatever skill level I'm on the computer always wins! But there are lots of little things to make Basket Master **addictive: the slam-dunk action replay, for instance, and (if you can master the controls) some fantastic trick shot combinations.**

The crowd doesn't give much atmosphere except by bobbing up and down now and then as if it were on springs, but otherwise Dinamic has done an excellent job on the graphics and animation. Basket Master **should be good for anyone into sport simulations, but watch out – that computer is a dirty fouler! "**

KATI

" Basket Master **is an impressive game. The graphics are extremely well-defined; the movement of the sprites is realistic and shown in plenty of detail, particularly under the magnification of the action replay; even the cheering audience performs its own little actions.**

Strategy is as important as quick reaction (just rushing in and tackling your opponent only results in fouls), so the initial appeal should last – the only drawback is that on all the levels, even the beginner's, the computer is hard to beat. Still, presumably even the Harlem Globetrotters had to work hard at first.

If you're looking for an unusual sports simulation and you're not put off by stiff computer opposition, go for a slam-dunk with Basket Master. **"**

► The all-important statistics

► A basket full of fun

MARK

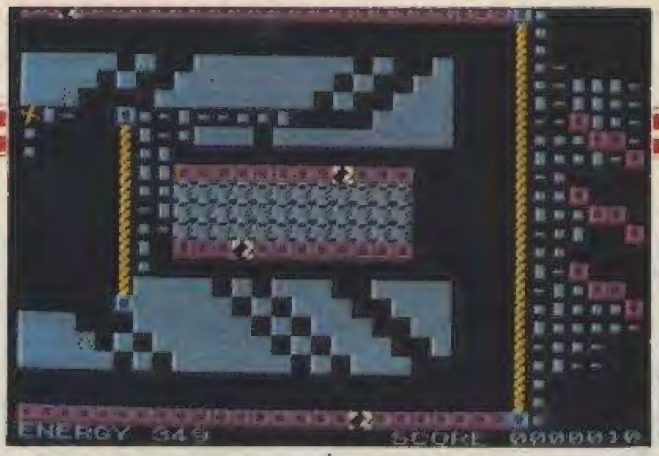
" Go for the two-player option in Basket Master **– the computer opponent is almost impossible to beat. When you have control of the ball he piles in, nicks it, and often scores a basket before you can even move!** Basket Master **is graphically nice but suffers because it's far too hard to play properly. "**

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: well-defined cartoon characters and a superb magnified action replay bring the game to life
Sound: simple title tune; few spot effects
Options: definable keys; one or two players
General rating: attractive, enjoyable and action-packed – but the computer opponent is much too hard for beginners

Presentation	77%
Graphics	79%
Playability	72%
Addictive qualities	69%
OVERALL	**73%**

SPORE



Producer: **Bulldog**
Retail price: **£1.99**
Author: **M Webb**

Deadly spores, so virulent that even TCP can't destroy them, have overrun a laboratory. One hope remains: the strong pesticide held in barrels throughout the building. And the task in *Spore* is to collect all the barrels on each level.

But the spores are continually released from generator blocks, and you must always be ready to destroy them with your blaster – before they infect you. Rejuvenating flasks and protective pills also help in the fight against sporedom.

Flashing yellow barriers can imprison you or block routes to the vital pesticide – and though you can destroy them by blasting appropriate mirrors and squares that, too, could release more torrents of spores.

MARK

" Though it's not graphically great, Spore's fast and furious action and tortuous mazes more than compensate for the main character looking like a demented starfish and the 'menacing' (!) square eponymous spores. Spore is a highly playable collect-'em-up. "

MIKE

" The challenge of quick blasting and quick thinking makes Spore instantly playable and addictive. The positioning of the mirrors and squares controlling the barriers means you have to pay as much attention to where and how you shoot as to the process of firing itself, and you should plan your progress through each level strategically.

And there are enough different elements (the pheromone pill which makes the spores run away, the flasks you have to be careful not to shoot) to sustain interest for several levels.

The graphics are colourful and distinctive, too, and there aren't many budget games with so much to offer. "

BYM

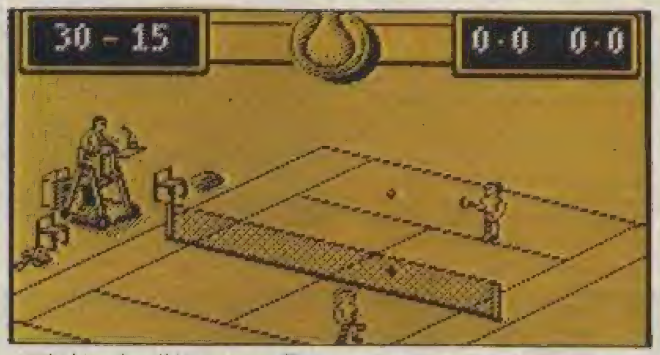
" Ah, this brings back memories – sweet memories of the good old ZX81 and the 16K Spectrum, with one-character-block graphics racing uncontrollably around the screen on a blast-everything mission. The sheer speed of Spore makes it hard to master, and what with its small graphics the game becomes a crazy brain-scrambling confrontation with the screen. At least the tune goes well with such an unbearable game. "

COMMENTS

Joysticks: Cursor, Kempston, Sinclair (none work, though!)
Graphics: small but well-defined characters
Sound: like dried peas in a tin
Options: definable keys (which, like the joysticks, don't function); maze-construction set
General rating: don't be put off by the simple display and control problems – *Spore* is very addictive

Presentation	55%
Graphics	46%
Playability	75%
Addictive qualities	78%
OVERALL	**67%**

GRAND PRIX TENNIS



Producer: **M.A.D.**
Retail price: **£2.99**

Ever dreamed of playing the Wimbledon final on centre court? Were you Bjorn to be a star? *Grand Prix Tennis* gives you the chance – grab your gear and your racket and get ready to pit your wits against a top professional player (human or computer!).

The contest is fought on a yellow monochrome tennis court, complete with umpire and players' chairs. Each match consists of three sets, and is played according to the rules of lawn tennis with a couple of minor alterations: players don't change ends, and the score table always shows player 1's score as the first (in the real game the server's score is the first).

Strokes ranging from simple forehands and backhands to complex smashes and lobs are available. Service is controlled by the FIRE button: make one press to throw up the ball, a second to make the shot.

At the end of a set the players can take a well-earned break on their courtside chairs, and the interval can be extended indefinitely to act almost as a pause option – though real stars shouldn't need a rest.

CRITICISM

● **" The graphics are dismal and the little people are barely recognisable;** Grand Prix Tennis **is just a mixture of yellow and black with white text, a waste of everything the Spectrum is really capable of. And when you go to hit the ball it doesn't have to touch the racket – a spot 20 pixels away seems quite satisfactory.** Grand Prix Tennis **is way below average. "**
NICK

● " The inlay calls this a 'fully accurate simulation' – but if Wimbledon were like *Grand Prix Tennis* no-one would bother to come. There's no atmosphere (no audience or line judges, and you don't even change ends), and as the ball swings in an unrealistic arc across the court it looks and feels like it's attached to the net or your racket by an invisible string. Whether you hit or miss is a question more of luck than of timing and technique.

And the graphics don't give a clear indication of where the ball has landed; budding John McEnroes have some really good excuses to rant and rave.

The thoughtless design of the controls makes things worse. The joystick directions are the reverse of the obvious: playing a forehand, naturally to the right of the player, is effected by pulling the joystick to the left. Instinctive reactions lead to confusion. "
KATI

● *" It's been proved that lawn tennis can work on the Spectrum* – Match Point *(Issue 8/89%) is a fine example – so I have no sympathy with such a substandard version as this. The graphics may look impressive on the glossy inlay (the same could be said of Konami's* Tennis*), but the programmer apparently didn't know the first thing about accurate collision-detection and smooth animation.*

And the very awkward control method is unresponsive as well as illogical.

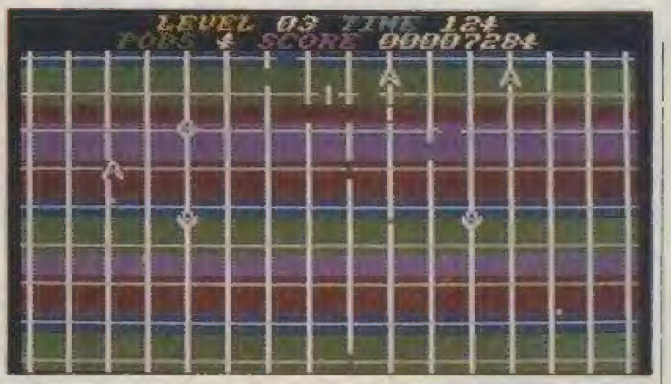
If people must produce lawn-tennis games, surely they should learn by others' mistakes – I mean, who's ever heard of a 3-D isometric tennis game?! "
PAUL

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: crude animation of stick characters
Sound: simplicity at its limits
Options: definable keys; one or two players
General rating: a poor attempt to simulate a sport which can be simulated well – with an absurd control method

Presentation	26%
Graphics	30%
Playability	20%
Addictive qualities	20%
OVERALL	**23%**

POD



Producer: **Mastertronic**
Retail price: **£1.99**
Authors: **Shaun Southern**

If anyone has ever doubted your shoot 'em up capabilities, now is the time to give Proof Of Destruction. *POD* has deliberately avoided any feeble scenario in favour of pure, unadulterated blasting.

In this case, the battleground is an interconnecting grid which spans an optional background of scrolling rainbow colours, and your POD (or PODs, for there is a two player option) can be directed anywhere along this matrix.

Aliens generally approach from the top of the screen and are swiftly despatched by the POD's blasters. The resultant explosion also destroys a piece of the grid and while the section heals within a few seconds, the gap is impassable and effectively restricts movement of both aliens and the POD.

Each level is timed, the aim being simply to stay alive until the timer runs out. An extra life is awarded every time a level is completed and thus the game only ends when all lives are lost during a level.

CRITICISM

● *" Yawn, there aren't many games that I almost fall asleep in the middle of, but POD is one of the exceptions; within a few games it had bored me to tears. All it seems to consist of is a few psychedelic, eye wrenching screens with tons of aliens pouring out bullets at your craft. This goes on screen after screen; blam, blam, blam. Graphically POD is okay, but in the playability stakes, it's more or less a non-starter. "*
MARK

● **" Yuk! What garish colours and terrible sound. And as for graphics – where are they? Each screen is just a grid with loads of little dots, lines and blobs, representing aliens, their bullets and your gunshots. Just to make it even more confusing your ship looks like the aliens'! The simplistic and difficult nature of the gameplay soon proves repetitive and ultimately boring. "**
NICK

● " Take a basic shoot 'em up, strip it of irrelevant scenario, take away the sound, throw in a flashy background and you're left with **POD**. The grid is an innovative idea, controls are smooth and the aliens fly in suitably devious formations. Unfortunately there is no atmosphere to complement the gameplay: sound effects are extremely limited and the rainbow scrolling merely obscures the action. Remove this and you're left with an uninspiring grid plus some very repetitive gameplay. One to avoid. "
KATI

COMMENTS

Joysticks: Cursor, Kempston, Sinclair
Graphics: the garish backgrounds make *POD* a strain on the eyes
Sound: below average, lacking originality
Options: definable keys, one or two players
General rating: a very poor shoot 'em up with little lastability

Presentation	28%
Graphics	21%
Playability	24%
Addictive qualities	18%
OVERALL	**21%**

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1988 – THE YEAR OF THE ROBOT

NOW YOU HAVE

"A GOOD REASON TO BUY SPECTRUM +3:" (Crash)

multiface three

"THE PLUS 3 DISC SOLUTION" (Sinclair User)

SPECTRUM+3 – THE BEST ADD-ON FOR MULTIFACE 3

In the beginning there was the Spectrum. Lots of people bought one. Lots of other people wrote games for the Spectrum, and lots of people bought those as well.

But there was a snag – everything used cassette tapes, which were fine for *Depeche Mode* but not for so but for computer software. Slow, unreliable and frustrating were some of the kinder terms used for the medium.

Now there's the 128K+3, a games machine that has all its software on tape and built in disc drive . . . Guess what Romantic Robot has produced?

Multiface 3, that's what. Plug it into your 128K+3, and load a game from tape. Press the red button and you can port it on to disc at any stage, yours to load in a trice at a whim's notice. Multiface works by waiting for the program to load and run. Then it takes a copy, and as the program was running at the time, it will run when the copy is loaded back later.

The tape to disc function of the Multiface 3 would be enough to recommend it to anyone. But there's more. When the red button is pressed, a whole range of functions appears. You can look through the 128K+3's memory, altering it at will. High scores have never been so easy to obtain. Memory can be displayed as hexadecimal, decimal or text. All of the 128K+3's 128K of Ram can be fiddled with, not just the 48K's worth that Basic has access to.

You can also print out areas of memory and screens in a variety of different forms. The Multiface 3 can do the same types of graphics dumps as its brother Multiprint, straight text, Spectrum-style *Copy* and a couple of shaded screen dumps. It can't do much more than 128K+3 Basic does, but it does it in the middle of programs.

The main purpose of the Multiface is to get things on to disc. As well as the simple *Save* and *Load*, it's got a few other tricks up its interface. You can, for example, use the disc from 48K mode. Lots of people get excited by this.

Other things that the Multiface can do is allow you to erase a file to make room on a disc, in case you need to save something in mid-game and can't get to Basic to do the deed. You can't *Format* a disc from the Multiface, alas.

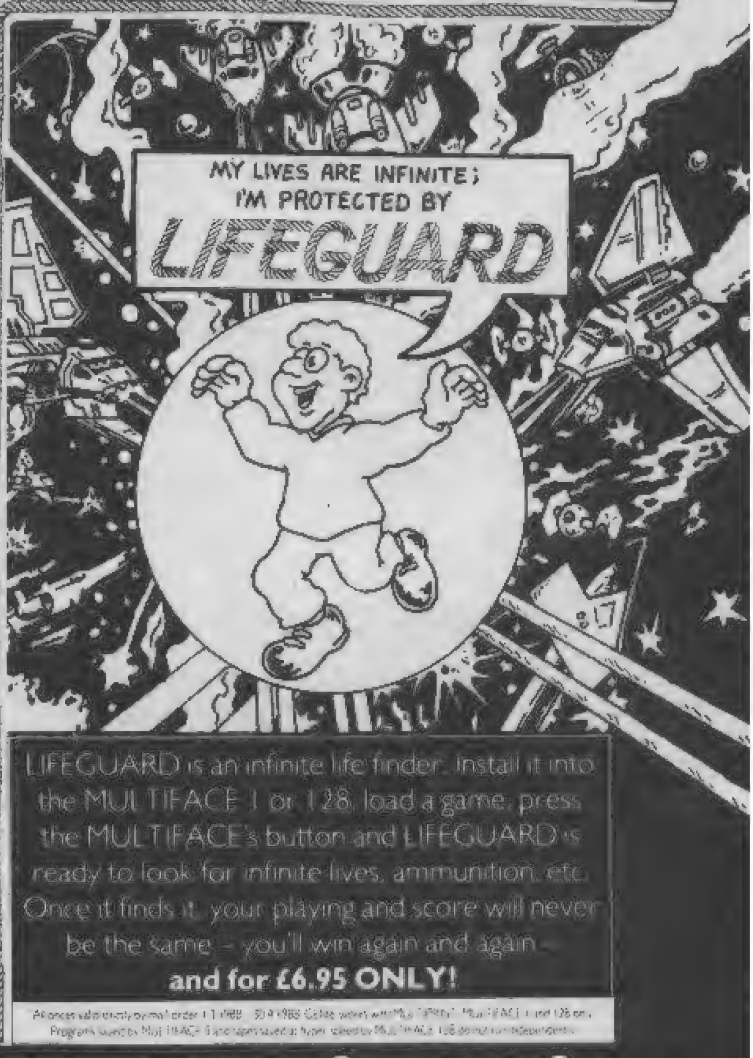
Multiface also compresses stuff automatically, and doesn't *Save* empty areas of memory. These two features mean that you can get (for example) more than three games on the 170-odd K allowed you per disc side. But you can turn those features off, if need be.

Everything is accessed by the traditional one- or two-line menu and single keypresses. Multiface 3 is very careful about invalid inputs, and didn't crash or otherwise misbehave at all. And I did try to confuse it.

More than that, what can I say? I enjoy a good rant, most reviewers do, but the Multiface 3 seems set on continuing the Romantic Robot tradition of doing the job reliably. I can't even complain a little.

Any 128K+3 owner will find it a wonderful device, indispensible even – I'm not giving mine back without a fight. I expect to see the usual extra programs appear for the best in due course (Genie et al), whereupon not owning a Multiface 3 will brand one a complete loser■

EXCERPTS FROM REVIEW IN [illegible]



LIFEGUARD is an infinite life finder. Install it into the MULTIFACE 1 or 128, load a game, press the MULTIFACE's button and LIFEGUARD is ready to look for infinite lives, ammunition, etc. Once it finds it, your playing and score will never be the same – you'll win again and again –

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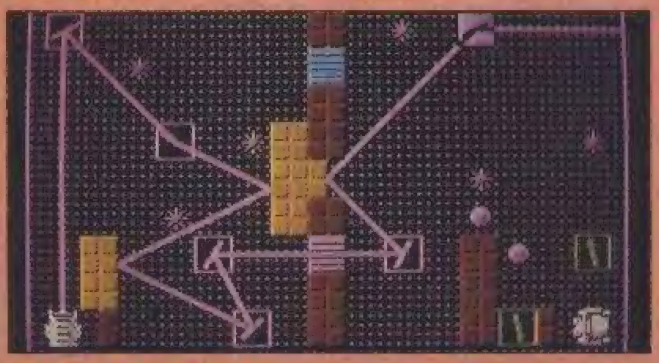
TOUR DE FORCE

Can you gain the coveted yellow jersey in Gremlin's grand prix cycling game. *Tour De Force* is 'a delightfully playable game . . . ' 'with original and addictive gameplay' said the reviewers in Issue 49 (66% Overall). This humorous little game will prove popular with any cycling fan.

MASK II

CRASH reviewed *MASK II* back in Issue 48 giving it a credible 81%, saying '*MASK II* is a top class game'. The tie-in element was very strong in this sequel which certainly proved popular with the reviewers. You can speed over all types of terrain using a choice of three vehicles – a sports car/jet, an armoured truck and an all-terrain vehicle. Every mission has its own objectives making *MASK II* exciting and addictive.



BLOOD VALLEY

Normally *Blood Valley* (reviewed on page 41 in this issue) would set you back £9.99, but with a subscription deal you can get the fantasy game, based on the Duelmaster series published by Armada, *free*. *Blood Valley* can be played by one or two players – fun for all the family!

DEFLEKTOR

The programmer of *Highway Encounter* and *T.L.L*, Costa Panayi, spawned this puzzling and addictive game. Using a series of mirrors and other assorted polarisers, fibre optics and absorbers you must guide the laser from one end of the maze to the home receiver – thus completing the circuit. The concept is simple but the resulting game is fiendishly difficult. We first looked at it in Issue 47, when it gained 77%. 'Simple, but cleverly effective', commented one enthusing reviewer, 'it's very addictive' said another.

VENOM STRIKES BACK

To appear on the Spectrum soon . . . In the third of the *MASK* series you must penetrate the VENOM base and rescue your son, Scott Tracker. Eradication of the evil Miles Mayhem would also be nice – it was he who kidnapped Scott in the first place. Sure to be another great game in the *MASK* series.

NORTH STAR

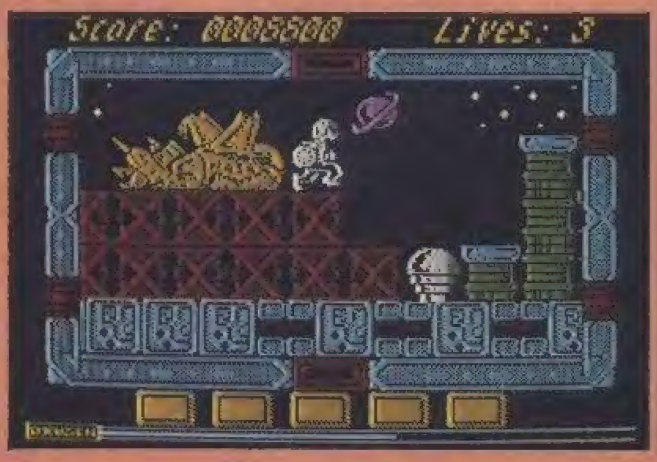
Another *Exolon* clone it may be – but there's no doubting the superb implementation of this Jon O'Brien programmed game. The reviewers raved about it in Issue 49 – it gained a CRASH Smash – saying 'the graphics are superb' and 'it's compelling and successful'. It's not just a simple shoot 'em up – *Northstar* requires strategic planning as well as a strong trigger finger.

BASIL THE GREAT MOUSE DETECTIVE

In the first of an exciting new licensing deal with Walt Disney you can take the role of the eponymous rodent in this exciting arcade adventure. Your mission is to find your old friend Doctor Dawson, who was kidnapped by the evil Professor Ratigan. The atmospheric graphics and sound make *Basil The Great Mouse Detective* a guaranteed favourite with all cartoon fans.

CYBERNOID THE FIGHTING MACHINE

Through a new marketing deal Gremlin Graphics have got their hands on Hewson's latest amazing game (see page 12 of this issue for more info) – and now so can you. Raffaele Cecco, of *Exolon* and *Equinox* fame, gained a massive 96% from the CRASH reviewers for his latest arcade quality game. Jump in his amazing fighting machine and blast away all and sundry. The ultimate in shoot 'em up fun!



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- ☐ BASIL THE GREAT MOUSE DETECTIVE
- ☐ NORTHSTAR
- ☐ MASK II
- ☐ BLOOD VALLEY
- ☐ VENOM STRIKES BACK
- ☐ DEFLEKTOR
- ☐ TOUR DE FORCE

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This offer is subject to availability and closes on May 4 1988. Subscriptions ordered by April 6 will start with Issue 52. Subscriptions ordered between April 6 and May 4 will start with Issue 53.

PREVIEW

Coming soon to a Spectrum near you!

EASTER EXTRAVAGANZA

COIN-OP PRODUCERS are giving away licences left, right and centre this month. **Activision** have recently gained the computer game rights to four arcade hits. Sega's ***Afterburner***, the hugely successful flight simulator, is the one that everyone's looking forward to, but it won't be out until the end of the year. They also have the amazing ***R-Type***, licensed from Irem, in which you blast your way through the monstrous Bydo empire. Sega's other two Activision deals come in the form of ***SDI*** and ***Time Scanner***. In *SDI* you must seek out hostile forces, and *Time Scanner* puts you at the controls of a sophisticated pinball machine.

Ocean, voted the Number One software house of 1987 by CRASH readers, try to sustain their success into 1988 with three tremendous arcade tie-ins. The game to play in the arcades at the moment is Taito's ***Operation Wolf***, and in a few months time, courtesy of the Manchester software house, it'll be the game to play on your home computer. Ocean are also sitting on ***Typhoon***, from the Konami arcade game, and SNK's ***Guerilla Wars***. All three shoot 'em ups should be released in autumn.

DEATHWISH

You can't keep a good game down and following Ocean's huge successes *Renegade* (89%, Issue 44) and *Green Beret* (88%, Issue 28) come ***Target Renegade*** and ***Vindicator – Green Beret II***. In *Target Renegade* you're back on the streets beating up punks and Beastie Boys fans as only you know how. What's been seen of it so far suggests something even better than the original. Both games should be out in the very near future.

As far as CRASH readers were concerned the biggest and best game of 1987 was, without a doubt, *Driller* (97%, Issue 47) – scooping five awards. Its graphics generation system, Freescape,

► *The Dark Side*: **sends your Spectrum to a new dimension**

took 14 months to programme and **Incentive** are determined to make the most of the innovative technique. The next game to come from the small Aldermaston software house is ***The Dark Side***, also programmed by the Major Developments team. It's set 200 years further into the future on the moon Tricuspid (also the name of a valve in the heart – Biology minion). Your main objective is to prevent the giant weapon known as Zephyr One from destroying Tricuspid. Your equipment comprises nothing more than a futuristic space suit, a quad laser, a protective band, and a jet pack for extra mobility.

The Dark Side makes use of all its predecessor's features and several new ones. At £9.95 (£5 cheaper than *Driller*) it should sell as well as CRASH hot off the press.

GOTHIK ADVENTURE

The long awaited ***Gothik*** from **Firebird** is now ready for release at £7.95. You play the part of a young warrior who must find the

six parts of an imprisoned Grand Wizard and reunite them with his trusty robe. The parts are trapped in the humble abode of an evil lord, comprising four dark towers, each of which has seven floors. In true arcade adventure style you can obtain an array of mediaeval objects and spells to help you in your quest; battle your way from humble 'pune' to victorious battlemaster.

Following in the remarkably successful sales of *Sidewize* (44%, Issue 50) comes ***Crosswize – Sidewize II*** from the same popular programmers, Steve Wetherill and Colin Grunes (who also programmed *Nodes Of Yesod* and *Heartland*). It claims to be 'the most technically innovative shoot 'em up ever written for the Spectrum' – we'll just have to wait and see! It features constantly changing, animated backdrops with an ominous alien to defeat at the end of each level – much like every other *Nemesis* clone.

► **He's *Gothik*, have you?**

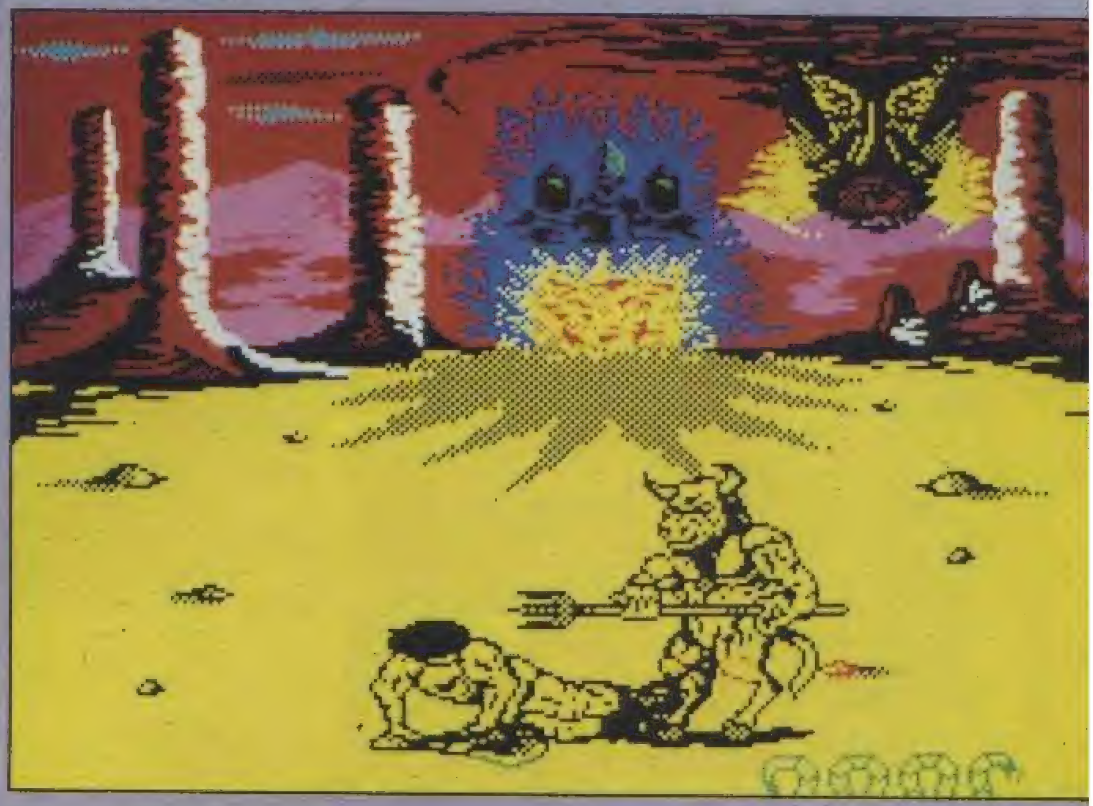
Heising (the one usually played by Peter Cushing in the horror films) must, with your help, try to rid mankind of the evil Count Dracula yet again. Everywhere horrible beings make their presence known; the decorations move, there are faces in the mud, and skulls in the very stones. These powers must be overcome in your quest to find the light ray with which you can bury Count Dracula for ever. You can trek through the 400+ rooms from mid-April.

There's nothing like a good old beat 'em up to get the crowds running to the software shops, and Gremlin Graphics have just the thing. ***Hercules***, that well known slayer of the damned, comes chopping his way on to the Spectrum at the end of April. Hercules has murdered his sleeping children due to a curse laid upon him by his wicked mother Hera (she won't be getting much for Mother's Day!). In response to his pleas for mercy, the gods send him to the stern King of Argos (no relation to the chain store, we trust) who sets Hercules 12 terrible tasks. He needs your help to complete them before the gods get tired of his attempts.

Gremlin's next release ***Alternative World Games***, which should be in the shops now, takes you all round the world to compete in a range of national pastimes. It's obviously a parody of the Epyx *Winter/World Games* series featuring offbeat events such as

Shoot or be shot in Cascade's *19 Part 1 – Boot Camp*, out soon. The game follows a 'grunt' (foot soldier) through the rigours of an army training camp – sequels will feature the young recruit in a real war. The programmers went to the Yorkshire moors to see what it was really like. Can you stand the pace?

► **Another gift from the gods**



GREMLIN BYTES

The **Magic Bytes** label (previously distributed by the now-defunct **Ariolasoft**) has recently been bought by **Gremlin Graphics** who will be marketing a whole range of exciting products under the title. First off will be the rinky dink ***Pink Panther***.

The famous cartoon character takes a job as the butler of a wealthy home owner, but the devious feline finds the opportunity too great to miss; he decides to relieve the rich employer of all worldly possessions. It's not as easy as chucking the stuff out of the window though. Oh no; as in the popular cartoon series, you must avoid the detective advances of the infamous Inspector Clouseau. The game is enhanced by a version of the legendary tune.

The second release on the Magic Bytes label is the ghoulish ***Vampire's Empire***. Dr Van

pole climbing, boot throwing, sack racing and running up walls! Each country has its own *alternative* national anthem – for example the Can-Can in France. A multiload, of course.

20TH CENTURY FOX

Following in the controversial steps of *Game Over* (Ocean), *Barbarian* (Palace) and *The Legend of the Amazon Women* (US Gold) from **Martech** comes ***Vixen***. This game seems destined to reach new depths of sexism in software. You play the part of the Foxy Lady of Granath (really) who, with her magic whip (honest!), must enter a cave complex and destroy the evil creatures that prevent her progress. The animation of Vixen and her fox double are digitised from the real thing (whatever that is).

Grand Slam (formerly Argus Press Software) have a whole batch of interesting releases for the next few months. First off, on the **Quicksilva** label, is ***Chubby Gristle*** – a story about a fat man who wants to get fatter! Then coming in June, on the Grand Slam label, there's ***Peter Beardsley's International Football***. Based on the exploits of the famous Liverpool/England footballer and from the same programmers that brought you *Gary Lineker's Football* (52%, Issue 49) it's said over four different landscapes and should be available in late June. The latest in armoured vehicles should be out in August (just in time for the Motor Show). ***Roadstar XRi***, which takes you across land, sea and air, comes from talented programmer John Phillips of *Nebulus* (85%, Issue 47) fame. Then, for release in September comes another shoot 'em up, ***Netherworld***. ***Asimodius – The Angel Of Death*** is another arcade adventure from Hewson waiting for a November release. Following closely after that is Raffaele Cecco's (CRASH Smashes, *Exolon* and *Cybernoid – The Fighting Machine*) next mysterious game, as yet without a name.

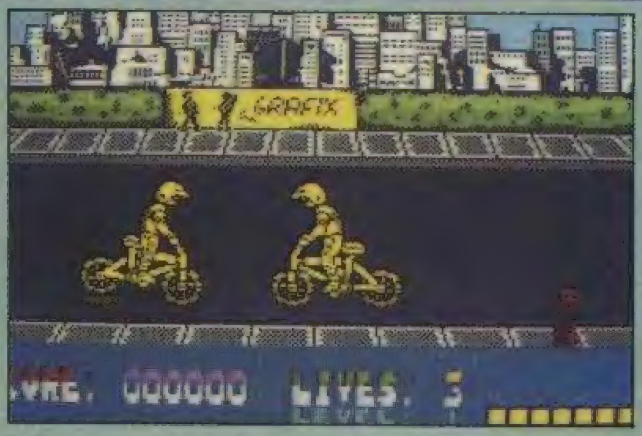
Accolade (the producers of *Hard Ball*, *Ace Of Aces* and *Psi-5 Trading Co.*) have recently signed up with **Electronic Arts** for the release of their next sports simulation, ***Mini-Putt***. Their latest sports release is based on the whacky activity of crazy golf. The game comes complete with theme courses (films, countries and arcade games) and three types of obstacles. Power and precision is needed to master this latest comical release.

Hewson's releases for the next year contain many exciting products. Next from the Abingdon offices comes ***Marauder***, written by Mark Kelly. In the same style as *Commando* it scrolls vertically to be better than *Match Day II*.

CURIOUSER AND CURIOUSER

ALTERNATIVE SOFTWARE have announced their imminent release of ***BMX Ninja*** at £1.99. Using your cycle ninja you must battle against skateboarders, fellow BMX riders and ninja scooters. It's all a test of skill and endurance; will you be able to produce the bunny hops, wheelies and back flips able to outwit your fellow contestants?

In true budget style, again from Pontefract-based Alternative, there's ***Future Bike Simulator***, programmed by Softstorm Developments. Straddle your jet-powered armoured bike and prepare to battle with fellow riders as you race through death alley. It comes from the same team that brought you **M.A.D.**'s *UCM* (87%, Issue 47).



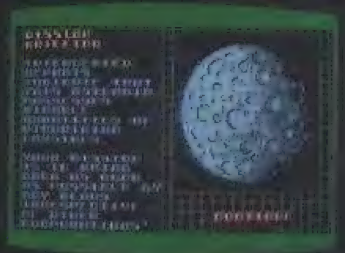
Following **Hewson**'s tremendous success with their first **Rack-It** release, *Ocean Conquerer* (Issue 45, 77%), comes ***Battle Valley***. From central HQ you must capture all the terrorist bases and destroy the enemy missile. You are aided by a chopper to rebuild broken bridges and a tank to protect you from the aggressive enemy forces – all for £2.99!

Budget software names get crazier all the time. **Top Ten Hits** have ***Dusty Droid And The Garbage Gobblers***, ***OK Yah!!*** – featuring Simon, the super yuppie and ***Don't Say It, Spray It!***. Then from **Firebird** you'll be seeing ***Muggins The Spaceman***, ***Ninja Scooter Simulator***, ***Blow Out*** and ***Pogo Stick Olympics***. **Mastertronic** not wanting to miss out on the fun, have got ***Super Trolley***.

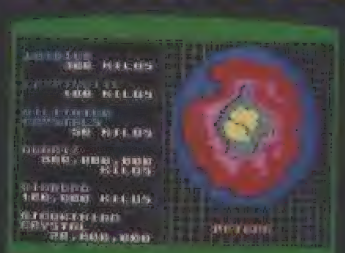
CORPORATION

ACTIVISION.

PLAY A BATTLE OF WITS IN CORPORATION . . .
Encounter a critical race against time for survival



Brilliantly designed, Corporation is a game of high skill and mental agility – challenging even for the advanced strategist.



Spectrum screens shown

It is 3028 AD. Planet Earth is governed by all powerful rival corporations. In deepest space, a lone asteroid, rich in Minorthan Crystal, is on a collision course with a sterile moon . . .
As Commander of a robotic space mining team, it is your awesome task to reach the asteroid and mine the crystal before the catastrophic cosmic collision – *and before your rival corporation's team gets there first . . .*
In this pulse-pounding race against time, the opposition is ruthless, the rewards fabulous and stakes appallingly high . . .

Commodore 64/128 Cassette (£9.99) and Disk (£14.99) ZX Spectrum 48k/128k/+ (£9.99) Amstrad CPC Cassette (£9.99) and Disk (£14.99)

ACTIVISION.

Mail Order: Activision (UK) Ltd., Units 3 & 4 Lloyds Close, Finedon Road Industrial Estate, Northampton NN8 4SR. Tel: 0933 76768.

Commodore programming by Daryl Bowers. Spectrum and Amstrad programming by Simon Freeman. Graphics by Focus.

ET AL

GOGGLE!

FUN TO COME

DOMINIC HANDY on video

APRIL is going to be one helluva month as far as comedy videos go. Kicking of the month to a tremendous start is the hilarious ***Outrageous Fortune*** (Rank, 15). It stars the wild dwarf, **Bette Midler**, alongside the equally funny **Shelley Long**. Both are having an affair with the same man, then, unexpectedly he dies in a mysterious accident – this is when the fun really starts! It's out now.

Also from Rank this month you can see **Richard Chamberlain** in the sequel to the poor 1985 second remake of *King Solomon's Mines* (it was first made in 1937 and then successfully remade in 1950), ***Allan Quatermain And The Lost City Of Gold*** (Rank, PG). Both the prequel and sequel were shot at the same time!

Burt Reynolds can be seen this month in the ludicrous ***Malone***. Reynolds plays an ex-CIA agent who must stop a megalomaniac (our own Brendon Kavanagh?) from taking over America.

In May from Rank comes **Matt Dillon** in ***Big Town*** (Rank, 18). Dillon stars as an up and coming gambler trying to make it big in the city. It starts off strongly but the storyline peters out towards the end.

Parts Four and Five of the *Crime Story* series are on the shelves now. In ***Part Four – The Vegas Connection*** (New World Video, 15) Lieutenant Mike Torello is given the job of uncovering the mob's connections in Las Vegas. ***Part Five – Luca's Fall*** sees Torello finally set for the Mafia boss's day of reckoning.

Creepshow 2 (New World Video, 18) enters the rental shops at the end of April. As in the much better *Creepshow*, the superb horror novelist **Stephen King**, provides the three short stories. Sadly even King's undoubted talent can't rescue this cheap-looking movie. (Watch out for King in the final segment as a truck driver.)

And from one horror sequel to another. ***A Nightmare On Elm Street 3: Dream Warriors*** (Warner, 18) is released on April 18. **Heather Langenkamp**, the original girl of the street in Part 1, returns to unravel and rescue the thoughts of a collection of suicidal teenagers in a mental asylum. It's a great improvement on Part 2, and well worth watching for the tremendous visual effects.

After appearing in the terrible *Burglar* last month **Whoopie Goldberg** returns with the much more successful, ***Jumpin' Jack Flash*** (CBS/Fox, 15). Goldberg plays the part of a computer operator in the big city who gets contacted (through her computer) by an american agent trapped behind the Iron Curtain. Goldberg, as per usual, carries the whole movie on her shoulders – and does a great job.

David Lynch's superb cult movie, ***Blue Velvet***, should have reached your screens by now. **Isabella Rossellini** and **Dennis Hopper** play a kinky nightclub singer and a sadistic kidnapper/drug dealer respectively. *Blue Velvet* was very powerful in the cinema, but I have my doubts whether it can be carried over to the small screen. Certainly not for the weak stomached!

The end of April finally sees the release of the hilarious ***Raising Arizona*** (CBS/Fox, 15). Starring **Nicholas Cage** and **Holly Hunter** in a hilarious comedy about an odd couple who kidnap a child because they can't have their own. You need to have a strange sense of humour to appreciate it to its full.

Beverly Hills Cop II (CIC Video, 15) is all set for release next month.

Axel Foley (**Eddie Murphy**), the wise-cracking Detroit cop, returns to Beverly Hills to uncover the Alphabet murders. All the old team are back, plus a few new ones – like **Brigitte Nielsen**, and the director, **Tony Scott**, (of *Top Gun* fame) whose influence is very evident.

CIC also have **Brian De Palma**'s ***The Untouchables*** (CIC Video, 18) waiting to burst into your home. **Sean Connery** (who has since gained an Oscar nomination for his performance) stars with **Kevin Costner** (who can currently be seen on the big screen in *No Way Out*) as the tough cops in the age of prohibition. Anyone whose seen the recently re-run TV series (on which the film was based) will know how fascinating and enthralling the whole story is. Don't miss it! **Ennio Morricone** again provides a superb soundtrack.

Getting on into May you can expect to see two great comedies – both from RCA/Columbia. ***Roxanne*** stars the tremendously talented and highly regarded **Steve Martin** as a fire chief whose undying love for a young girl (**Daryl Hannah**) can not be stopped – even by the tremendously long nose he has. Then following quickly in its footsteps comes **Woody Allen**'s latest self-indulgent, but comically amusing, film. ***Radio Days*** is another trip down memory lane reliving the times when all the family used to huddle up around the wireless for a bit of entertainment and fantasy. All good, clean fun. I wonder if they'll bring out *Video Days* as the follow-up next century!

Lastly, all of you that have been waiting for five years since ***E.T.*** first came out in the cinemas will be happy to hear that CIC Video have finally gained the video rights for it, and are set to release it in . . . Autumn. Well that's more precise than 'possibly never' which was Spielberg's first reaction to the suggestion of a video release. *E.T.* is the biggest grossing film EVER, taking an amazing $700 million worldwide, and gaining nine Academy Award nominations, so the release should be quite an occasion.

ABOUT TIMES TOO

FOR ALL those aspiring Yuppies out there – there is now a newspaper for YOU! *Early Times* is aimed mainly at the 8-14 year old group and is published weekly from Garth Publications. 'The independent newspaper for young people' shows strong influences from 'quality' newspapers, such as *The Independent* (indeed it was this paper that provided the inspiration for its founder Dr Barry Weightman), providing clearly-produced photographs and a large amount of illustrations.

Early Times covers a wide range of subjects chosen for their specific interest to children. There are sections on cookery (containing recipes similar to those on the BBC's *Why Don't You?*), lot of TV coverage (mainly on the soaps) and general informative and review sections on film and theatre. *Early Times* also has a large amount of news from all parts of the world of interest to or concerning the younger generation – like the Winter Olympics, the televising of the House of Commons and even such issues as the Russian involvement in Afghanistan. There is a also very interesting (but rather cynical) 'agony aunt' column – youngsters also have problems – and a comprehensive listings section.

Early Times is definitely worth looking out for – and has a lot of backing from newagents so it's not hard to get, thank goodness. But fifty pence is a large chunk out of someone's weekly pocket money.

WINNERS & PRIZES

HERE'S LOOKING AT HEWSON

Issue 49

Leroy Bagwell of Devon EX10 0DU was overjoyed when we told him that he'd won the fabulous Philips compact disk portable stereo system that Hewson were giving away in the *Four Smash Hits* wordsquare competition. He also receives one of the 51 copies of the *Four Smash Hits* compilation – containing such games as *Exolon*, *Rana Rama*, *Uridium +* and *Zynaps*. *Due to an editorial cock-up we stated we were giving away 25 copies of Four Smash Hits*, we are in fact giving away FIFTY. So if you're in the bottom 25 of these 50 runners up, count yourself lucky! They happen to be . . .
Andrew Wilson, Essex RM2 6QD; Johnston Orr, Scotland ML10 6HT; Peter Wilson, Cleveland TS26 0HX; James R Bould, Sheffield S30 4WL; Alyn Bailey, Dorset BH9 2TX; Stephen Martin, London N13 5DT; M T Hannam, Southampton SO2 9HZ; M Tyler, S.Glam CF6 7UG; Gareth Haynes, West Midlands WS2 0AJ; Jonathan Bell, Surrey KT21 1NG; J M Stewart, West Midlands B90 4RQ; Nicholas Sweeney, Cleveland TS8 0RS; Steven Cooper, Cleveland TS5 8UJ; Andrew Brookes, S.Yorks S10 1NL; Sean O'Donnell, Lincolnshire LN12 1PX; Nicholas Holland, Berks SL6 2EY; Richard A Lamb, Surrey CR0 8HZ; Simon Penfold, Gwent NP2 1GP; A Goode, Birmingham B42 1LW; Matthew Barton, Devon PL16 0EP; Mr R Mellish, Berks RG12 3DA; Jon Stevens, Suffolk CO70 0QH; David Thomas, Middx UB5 5DN; Carl Hesketh, Lancs BB1 2AJ; Ian McKay, Leeds LS14 2DJ; Kevin Moses, Cleveland TS19 8UW; Jonathan Ford, Wilts SN10 4LN; Mr Colin Davies, Herts SG1 4HB; Adam White, Lincoln LN5 0EY; Dylan Wyn Jones, North Wales LL41 3HD; David Merrett, Essex SS6 8NU; Greg Singer, Aberdeenshire AB5 6LW; Richard Crump, Kent CT19 5PU; Jose Pedro Meireles Ferreira, PORTUGAL; Adam Vaughan, Northants NN12 8XQ; Mr S Wells, Notts NG18 3HT; D Wands, Scotland IV36 0HD; M Edwards, Kent ME1 2SL; J D Doggett, Herts EN6 2AP; Simon Miller, Herts S64 9PR; Simon A Blackwell, Coventry CV3 4EX; James Cockram, Essex CO4 5JF; Pierre Scotney, Bristol BS20 8BQ; Peter Robinson, Kent CT9 4NA; Nicholas Pater, Cumbria CA28 6XJ; Matthew Sanderson, Northampton NN2 8TB; Liam Parnell, W.Yorks HD7 1XB; Darren Mauger, Channel Islands; Mr M Conway, Merseyside L6 5HT; Ian Hargreaves, Oxfordshire OX7 5NT.

IT ALL ADDS UP TO A TERRIFIC INCENTIVE

Issue 49

Holograms were the order of the day in Incentive's *Driller* competition. The five lucky winners who found the two solutions to Ian Andrew's problem, will each receive a framed hologram of the composer Offenbach. They are:
Matthew Stott from the West Midlands WV10 6UB; **David Pearce** from Cleveland TS9 6HJ; **Jay Ford** of Bucks SL2 1QF; **Wayne Gooch** from Gwynedd LL30 1TF and **Michael J Brown** who lives in Yorks. The 30 runners up, who each receive a holographic horrorgram sticker and a copy of *Driller*, are . . .
Keith Salisbury, Surrey KT5 8HG; Carl Thompson, Tyne & Wear NE10 0HL; Steve Barge, Glos GL8 8BE; Craig Singleton, Scotland KA1 5DX; Robert Howe, Newcastle NE15 0NR; Anthony Gallagher, Lincs LN11 8TY; Stewart Anderson, N.Ireland BT4 2EG; Julian Rex, Avon BS9 3BG; Vanbrabant Francis, BELGIUM; Jorgen Jacobsen, DENMARK; David G Thompson, London E4 6NA; David J Haire, Staffordshire; David Garland, Norfolk NR19 1NL; James Moor, Cleveland TS15 0JZ; Paul Maclean, W.Sussex RH15 0SS; David Gill, Birmingham B11 1HA; Glen Huckman, Essex SS12 8AG; John Studholme, W.Yorks BD7 2PP; K P Foster, Cleveland TS18 3LH; Ian Hopper, Kent ME6 5EH; David Allison, Glasgow G44 4RX; Richard Tonswell, Suffolk IP28 7LQ; Andrew Pryde, Cleveland TS17 9PQ; Craig Rore, Glasgow G46 6QH; Mr M J Clapton, Lincs NG34 8EP; Simon Harrison-Smith, Chester CH4 7EU; Peter Watson, Lancs BL2 5LX; David Durose, Staffs ST9 9EZ; Andrew Watts, Staffs WS14 9BA; Mark Coster, Surrey KT17 3JB.

A SMASHING COMP WITH SYSTEM 3

Issue 49

The lucky winner of the *IK+* competition a couple of issues ago received a terrific Matsui VX7500 video recorder and a copy of the Smashed game. The winner being, **James Hodgkiss** from somewhere in the West Midlands WV14 6LT, who made 7137 words out of the words 'International Karate Plus'. The 20 runners-up who each get a copy of the game are . . .
Simon Sheppard, Leconfield HU17 7NY; J J Renn, Hants SO4 5AF; Mrs Penny Westley, Bedfordshire LU5 4BJ; Mr F Howard, Hants PO9 4AR; Danny Slay, Oxford OX4 1JT; Paul Jameson, Beds MK42 7LS; Paul C Willows, South Yorkshire DN12 3HZ; Mike Young, Bristol BS9 1ES; Nigel Baker, S.Glamorgan CF6 6JW; Dave Chapple, Cornwall PL12 4HR; John Hopper, Notts NG18 3DU; Colin Andrew, Cheshire SK14 8EP; Stephen M Flack, Northants NN9 4QE; J Skipper, Norfolk NR20 4HD; Martin Perrott, Bristol BS9 3TA; Peter Watson, Lancs BL2 5LX; Robert Innes, Cheshire SK15 2HF; Alan Theobald, Northants NN14 4NF; Richard Jones, Milton Keynes MK8 9BW; Shaun Saxon, Cheshire CW3 9BH.

All winners, please allow 28 days for the delivery of your prizes. All queries regarding competitions run in CRASH should be sent to **Frances Mable, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB***. Please don't ring Frances as she has enough trouble reading through all your entries as it is.

CRASH ZX SPECTRUM

THE CLASSIFIEDS

CRASH BACK NUMBERS

I HAVE CRASH for sale. Contact: Ian Buck, *Cuckoo Pen, Aughton, Collingbourne, Kingston, Marlborough SN8 3SA*. Tel: 026485 286.

WANTED CRASH back numbers One and 13. Will pay 40p each issue, if in good condition. Phone: 0858 63375 ask for Paul Robinson.

WANTED RADIO CONTROLLED off road buggy or other R/C vehicle, for Issues 11-47. Also wanted flight sims. Phone: 048 525 237 ask for Andrew Holme.

CRASH FOR SALE Issues 17 to 40. Good condition £35 ono. Including P&P. Tel: 051 334 1459 after 4.30pm ask for Dave Wilkinson.

CRASH FOR SALE Issues 2-12 plus binder, £35. Will share cost of postage. Contact: Graham Persson, *46 Balfour Street, Leith, Edinburgh EH6 5ER*.

COMPLETE SET OF CRASH for sale. Issues 1-46, will not separate £15 including P&P. All CRASH freebies. Phone: 01 540 6963 after 5pm, ask for Tony Au.

FANZINES

NEW FANZINE PBM file issue. One contains *It's A Crime* information, hint and tips. Send 70p and A4 SAE to: P Rankin, *Pepper Lane, Standish, Wigan, Lancs WN6 0PY*.

WANTED POKEs, hints, tips and maps for a new mag. Send them to: Stephen Robinson, *3 Fieldway Lodge, St.Annes-On-Sea, Lancs FY8 3BL*.

ARE YOU INTO *The Hobbit* and *Lord Of The Rings*? Fancy forming a club? Send your ideas to: Jethro Travill, *118 Kinsley Road, Kingsley, Northampton NN2 7BY*.

IF YOU WANT tips, POKEs, maps for help for any game, new or old send a large SAE to: Paul Ryan, *292 Northway, Maghull, Merseyside L31 6BQ*.

EPROM FANZINE! You want class? You got it! 128K Special 128 music, reviews, 52 pages. Issue 3 only 70p plus stamp. Write to: *EPROM, 328 The Maltings, Penwortham, Preston PR1 9FD*.

YOUR SPEC. Order the first issue now. Send 50p and an A4 SAE to: P & J, *48 Wolfit Avenue, Balderton, Newark, Notts NG24 3PH*. State name and address. (Need your POKEs and maps).

SPECSCENE established Spectrum fanzine. Issue 10 only 30p plus stamp. Send to: Andrew Steel, *85 Kipling Way, Stowmarket, Suffolk IP14 1TS*. Can you afford not to buy it?

MULTIFACE, DATEL SNAPSHOT POKE magazine. *Instant Access*, issue two out now, only £1. Send to: Catherine Redgrave, *30 New Barton Street, Salford, Manchester M6 7WW*. Without it there would be no Multiface.

PBM

ESTABLISHED SOCCER PBM. Cash prizes. New league starting late December. £1 to start and 20p per go. Contact: Neil Kurz, *8 Mayfield Close, Old Harlow, Essex CM17 0LH*.

LOOKING FOR A new PBM to play? Well it's here! and it's called *Dragon Realm*. Send for details now to: Chris May, *Landevon, Dawes Close, Dobwalls, near Liskeard, Cornwall PL14 6JG*.

PBM win the league title, a brand new football management game, where only the best win cash prizes. Send SAE 9"x4" to: FDS, *85 Fortescue Road, Colliers Wood, London SW19 2EA*.

FREE CRICKET PBM – simply enclose a SAE each turn. This game is exciting, new and definitely you. Contact: John Spink, *DD11 5AW*.

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OTHER

DUNGEON MASTER GUIDE and players handbook, advanced books £10 ono. Write to: Geoff Tidey, *53 Shephall Green, Stevenage, Herts SG2 9XS*.

BEST SOFTWARE including 19 CRASH Smashes. Swap for full size dot matrix printer or sell for £125. Tel: 0734 860603 ask for Gareth.

I HAVE A SEGA Console and would like to swap/sell/buy games. I have *Space Harrier*, *Choplifter* etc. Write to: A Bonner, *4 Park Grove, Bexleyheath, Kent DA7 6AA*.

FREEBIES! Free POKEs, free colour posters and a free software swap and sales advertiser! Rush three 13p stamps to: R C Burgess, *1 Middlefield Road, Rotherham, S.Yorks S60 3JH*.

PEN-PALS SPECIAL IN ISSUE 53

A Bic is a man's best friend – at least when it links him to more than a quarter of a million CRASH readers worldwide. And a special section in CRASH Issue 53 (on sale May 26) will bring together thousands of CRASH readers looking for inky encounters with pen pals at home or abroad.

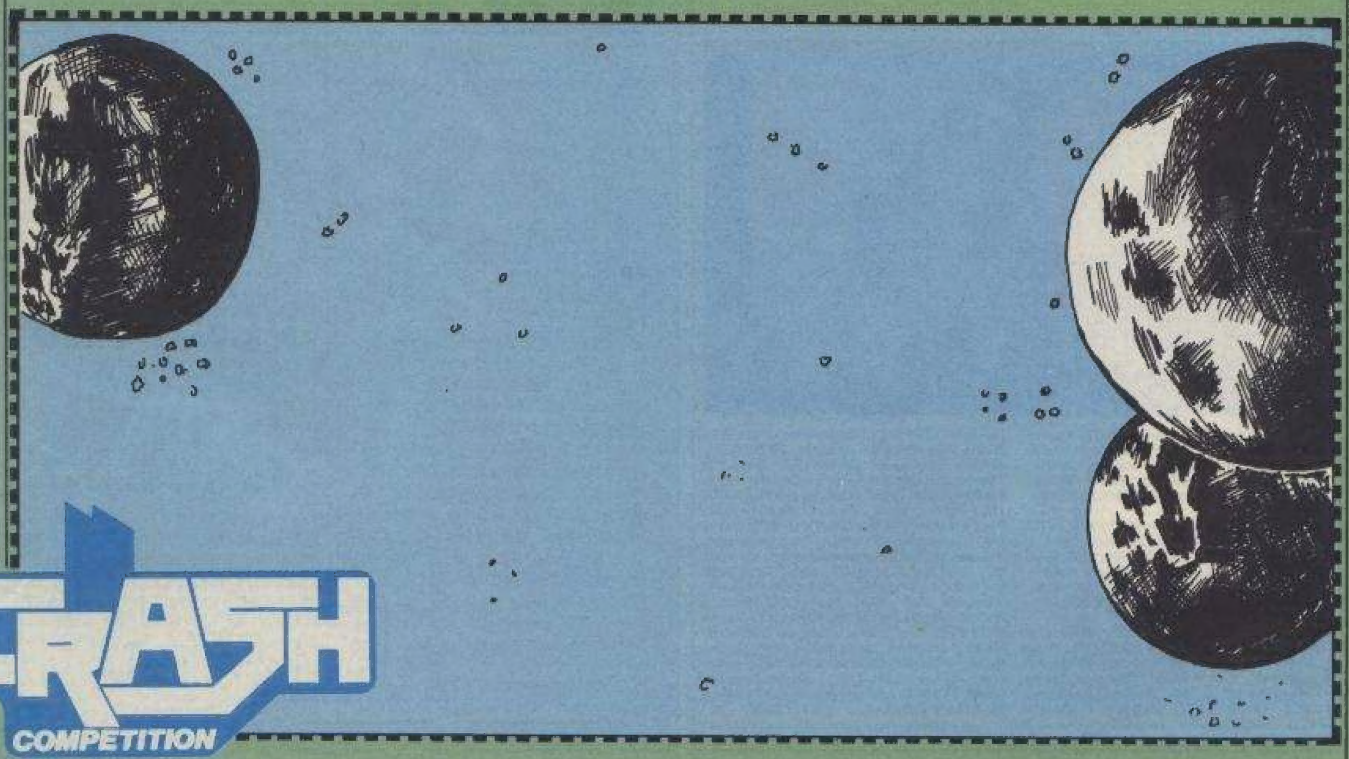
If you want to do the write thing and find a pen pal, just send your ad in on the CRASH classifieds form. Don't forget to tell all those unmatched nibs out there what you're interested in – and where you live!

The address is **PEN PALS, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB***. Make sure your ad arrives at CRASH by May 3, and then just sit back and wait for the letter box to snap. Remember, ballpoints are forever.

If your ad isn't featured this month, don't despair! We'll do our best to get it in ASAP ono (as they say in classifieds), and if the worst comes to the worst (which it hasn't for three months now, but we're still waiting) you can always send the ad in again.

BE A PIRATE OF THE AIRWAVES

WITH A CORDLESS TELEPHONE FROM HEWSON



CRASH COMPETITION

HEWSON'S *Cybernoid*, the lean mean fighting machine, has soared to success this month with a CRASH Smash rating of 96%. Contracted by the Federation to deal with a pirate raid, the sleek, sophisticated ship has an arsenal of weapons to wipe out the insidious invaders. But imagine for a moment what it must be like for the pirates: one long round of drudgery, taking bit parts in other people's games, emptying the Federation coffers with nothing but a rattling, shuddering heap of junk machinery between you and the cool, dark sky. The heroes get all the good ships, insurance rates are astronomically high and the chances of you returning home to enjoy the odd tot of rum and a bit of laserplay are slim. Even in the 23rd century a pirate's lot is not a happy one.

Wouldn't it be great, therefore, if you could design your own customised battle machine – one with just as many extras, add-ons and innovations as *Cybernoid* has and more? The Federation run would be far less dangerous then; you might even make it home to enjoy some of your well-deserved spoils in the cosiness of your personal pirate den.

Would-be pirates look no further – CRASH is giving you the chance to design your own machine. Just draw the best equipped pirate ship you can think of, with as many boosters, blasters, fixtures and fittings as you like.

Two outright winners, whose entries are judged to be the most innovative designs, will be rewarded with a Commtel 828 cordless telephone – a great way of communicating with other pirate ships.

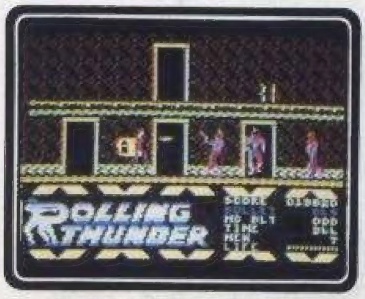
Five second-prizewinners will steal away with a Cybernoid sweatshirt, while **25 runners-up** will receive a copy of the game.

So, grab your pencils and send your entry to: **COME TELL HEWSON COMP, CRASH, *PO Box 10, Ludlow, Shropshire SY8 1DB*** to arrive by **May 3**.

Make yourself happy – win that 'phone!

ROLLING THUNDER™

namco



Screen shot from CBM version.

Screen shot from Spectrum version.

Screen shot from Amstrad version.

Have you got what it takes.... ....to be an RT undercover cop?

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RENEGADE
In the knife-edge world of the vigilante there is no place to hide, no time to think – but look sharp – there is always time to die! You will encounter the disciples of evil who's mission it is to exterminate the only man on earth who dares to throw down the gauntlet in their path – the Renegade.
PLAY RENEGADE...PLAY MEAN!
Licensed from Taito Corp. 1986

IK+
They called International Karate 'the greatest karate beat 'em up yet' (Commodore User) Just who are we to argue? But ARCHER MACLEAN has come up with a stunner! A third fighter, An amazing animated background. New moves including double head-kick and a spectacular back-flip. Remixed music by JOB HUBBARD. And balls!
© 1987 Archer Maclean © 1987 System 3 Software Ltd

SUPER SPRINT
Licensed from Atari Games' original money-spinning colossus, one or two players compete head-to-head over eight gruelling tracks and four levels of game difficulty. Avoid the hazards and collect golden spanners which can be traded for vehicle- enhancing custom car features – the key to Super Sprint. With detailed animation and sound effects, Super Sprint brings the best driving excitement ever to be experienced on home computers.
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RAMPAGE
The game where the nice guys don't get a look in.
Grab your way through Chicago, punch up New York, and jump on San Francisco. Three indescribably nasty characters which bear a remarkable likeness to King Kong, Godzilla and Wolf-man, needs you to send them on a rampage on an enduring 150 days of destruction, through 50 different cities.
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All rights reserved. Activision inc.

BARBARIAN
THE STORY SO FAR...
The evil sorcerer Drax has sworn to wreak an unspeakable doom on the people of the Jewelled City unless Princess Mariana is delivered to him. However, he has agreed that if a champion can be found who is able to defeat his demonic guardians, the Princess will be released. From the wastelands of the North, comes an unknown barbarian, a mighty warrior, wielding his broadsword with deadly skill. Can he vanquish the forces of Darkness and free the Princess?
ONLY YOU CAN SAY...
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